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ABSTRACT

The study examines post office mail processing equipment (MPE) maintenance positions on the basis of interviews conducted among maintenance mechanics and supervisors at 17 small, medium, and large mechanized post offices for the purpose of determining existing and desired maintenance practices and maintenance personnel policy. The study considers nine problem areas: decreasing manpower pool, distinctions between mechanic grades, career ladders, entrance and promotion examinations, apprenticeship programs, in-house training systems, specialization guidelines, pay comparability, and full utilization of mechanics. The study makes recommendations with respect to: restructuring MPE maintenance department jobs; maintenance career ladders; training of MPE mechanics; classification of post office MPE maintenance positions; and job descriptions, job assignments, and staffing criteria. Five appendixes, comprising more than half the document, contain proposed job descriptions (functions, duties and responsibilities, organizational relationships, and qualifications for nine positions); a 30-page job analysis and job evaluation form for equipment maintenance positions; a list of the U.S. Post Offices surveyed; job evaluation questions and job rating tables; and a conversion and reclassification guide for MPE mechanics. (JR)

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SUBTASK REPORT

Classification, Career Structure and Job Analysis of Mail Processing Equipment Maintenance Personnel

by

C. Dennis Fink and Francis L. Hibbits

April 1969

United States Post Office Department
Contract No. RE 73-67
PPBS No. 70-80

This report has been prepared to provide information for direct working use on the results of one portion of a larger research effort (Task MPE). The report has not been reviewed by, nor does it necessarily represent the official opinion or policy of the Post Office Department unless so designated by other authorized documents.

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ABSTRACT

This study examined post office mail processing equipment (MPE) maintenance positions for the purpose of: (1) developing improved job descriptions; (2) developing an MPE maintenance career ladder; (3) developing recommendations regarding the training and promotion of MPE mechanics; and (4) re-evaluating existing maintenance positions using the job evaluation criteria developed as an aid to the establishment of the PFS classification system. Maintenance mechanics and supervisors at 17 small, medium and large mechanized offices were interviewed regarding existing and desired maintenance practices and maintenance personnel policies. Study findings and recommendations are discussed in relation to nine maintenance problems typically found at mechanized post offices. Major recommendations include: (1) that the POD develop an improved training system for MPE mechanics to include the establishment of an MPE mechanic apprenticeship program; (2) that existing MPE maintenance positions be restructured so as to establish an MPE career ladder extending from the PFS-4 helper to a PFS-10 MPE foreman position; (3) that existing journeyman MPE maintenance positions be reclassified upward by one PFS level; (4) that the promotion of MPE mechanics be closely tied to a requirement to maintain a wider variety of equipments and perform more sophisticated types of maintenance. It was suggested that the development of improved staffing criteria for office maintenance organizations should be a prerequisite to implementation of the above recommendations.

FOREWORD

The mail processing equipment (MPE) classification subtask described in this report was conducted by the Human Resources Research Office as part of HumRRO Task MPE, whose overall objective was to develop improved classification and selection procedures for mail processing equipment maintenance positions. This report deals with the development of classification procedures, a maintenance career ladder, and improved MPE job descriptions, and has been prepared to provide direct working materials for the Post Office Department. A second Task MPE report on postal maintenance examinations describes the development of four maintenance examinations to replace those currently used by the post office; a third Task MPE report concerns the analysis of postal maintenance jobs and presents the data developed as a result of an analysis of MPE maintenance job positions.

The MPE classification subtask was initiated in early 1968, was temporarily suspended during the summer of 1968, and was completed during the winter of 1968-1969. The research was performed by HumRRO Division No. 1 (System Operations), under the overall direction of Dr. J. Daniel Lyons, Director of Research. Dr. C. Dennis Fink was the Study Leader with Mr. Francis L. Hibbits as Principal Associate.

The interest, support, and cooperation of many Post Office Department personnel who provided assistance and technical advice were invaluable to the study. Chief among these people were Mrs. Anne Flory and Mr. Marlin Burkhart, Compensation Division, Bureau of Personnel; Mr. Walter Kreimann and Mr. David McCutcheon, Maintenance Division, Bureau of Facilities; Miss Ruth O. Peters, Employment and Placement Division, Bureau of Personnel; and Mr. Edwin Vollmer, Bureau of Operations. Mr. Vincent J. Chirichella and members of his maintenance management staff at the Washington, D.C. Post Office provided invaluable assistance and technical advice; there was excellent cooperation by maintenance staff personnel at the 17 mechanized post offices where the basic data for this study were collected.

HumRRO research was conducted under Contract No. RE 73-67, PPBS No. 70-80, U.S. Post Office Department.

Meredith P. Crawford
Director
Human Resources Research Office

SUMMARY AND RECOMMENDATIONS

The Problem

The purpose of this study was to examine post office mail processing equipment (MPE) maintenance positions for the purpose of: (1) developing improved job descriptions; (2) developing an MPE mechanic career ladder; (3) devising recommendations regarding the classification of MPE maintenance positions; and (4) re-evaluating existing maintenance positions using the job evaluation criteria developed as an aid to the establishment of the PFS classification system.

Method

A detailed analysis was made of MPE equipment in order to determine the skills and knowledges required to maintain that equipment. Also, MPE mechanics were surveyed to determine the activities in which they engage, and maintenance supervisors were queried regarding the types of maintenance assignments they give to various types and grades of mechanics. Post office publications relating to maintenance practices and requirements were examined in detail, and maintenance mechanics and foremen at 17 small, medium and large mechanized post offices were interviewed regarding existing and desirable maintenance practices and maintenance personnel policies.

Principal Results

The major findings of the study are discussed in relation to nine problem areas typically found at mechanized offices. It was found that there is a decreasing number of postal personnel qualified to enter the equipment maintenance force, and it is projected that post offices will experience difficulty in staffing their equipment maintenance departments from within. This situation can be related to the need for more realistic entrance examinations and to the need for an in-house training system for MPE mechanics. It was found that the present MPE examinations are not as job-relevant as they should be and eliminate from further consideration certain mechanics who do have the capability of learning to maintain MPE equipment.

It was found that most offices do not have a systematic in-house training program for MPE mechanics. There is a need for training programs which will prepare custodial workers and mechanic's helpers to meet MPE mechanic entrance requirements. Secondly, there is a need to establish POD-wide MPE mechanic apprenticeship courses to assure that new MPE mechanics will acquire rapidly an acceptable maintenance capability and a potential for full career progression. Finally, there is a need for training packages to teach journeyman mechanics how to maintain different types of MPE equipments.

An examination of promotion practices revealed little standardization. At present there is no well defined career ladder for MPE mechanics and the distinction between the MPE-6 and the MPE-7 mechanic is practically non-existant with respect to job assignment practices.

It was found that the degree to which an MPE mechanic is allowed to specialize depends upon the requirements of or desires of his supervisor. Some mechanics have become very narrow specialists while at other offices the mechanics have been required to master maintenance on all types of MPE equipments. Such findings indicate a need to restructure the MPE maintenance department to more definitively define job duties and responsibilities for different grades and types of mechanics.

An examination of pay comparability of MPE mechanics suggested that the salary level of such mechanics should be raised by one PFS grade. Using the job evaluation criteria originally used as an aid in establishing the PFS system, it was found that practically all MPE maintenance and related positions merited a one grade increase.

A listing of the problem areas along with recommendations designed to alleviate these problems are as follows:

Problem #1 Decreasing Manpower Pool of Potential MPE Mechanics

1. In recognition of the high skill and knowledge requirements for MPE mechanics, raise the PFS-level of these positions by one grade.
2. Provide training programs and procedures whereby, at each office, interested persons can prepare themselves for the MPE examinations.
3. Develop an apprenticeship training program for new MPE mechanics.
4. Provide for automatic promotion following successful completion of each phase of development in an apprenticeship training program.

Problem #2 Lack of Distinction between MPE-6 and MPE-7 Mechanics

1. Require higher-grade mechanics to perform (a) more complicated maintenance actions on (b) more varieties of MPE equipments.
   a. require present MPE-6 mechanics to perform all maintenance on any two types of MPE equipment, at a minimum.
   b. require present MPE-7 mechanics to perform all maintenance on any three types of MPE equipment, at a minimum.
   c. for each mechanic, prepare an individual job description which describes primary and secondary maintenance responsibilities in terms of those equipments which he must learn to maintain.

Problem #3 Need for an MPE Mechanic Career Ladder

1. Establish a maintenance career ladder which extends from the PFS-4 helper position to a PFS-10 MPE foreman position.
   a. establish two apprenticeship positions at the PFS-5 and PFS-6 levels.
   b. establish three journeymen MPE positions at the 7, 8 and 9 PFS levels.
   c. Make promotion of the apprenticeship 5 to the apprenticeship PFS-6 level automatic following successful completion of the first portion of apprenticeship training.
   d. make promotion to the MPE mechanic (PFS-7) position automatic following successful completion of the second portion of apprenticeship training.
   e. the essential difference between the PFS-7 and PFS-8 MPE mechanics be in terms of the requirement of the PFS-8 mechanics to (a) maintain a wider variety of equipment, and (b) be more capable at maintaining electro-mechanical control circuits.
   f. establish a MPE technician (PFS-9) position and have the incumbents of that position be required to become the office technician expert on at least three major types of MPE equipment.

g. have those persons failing the MPE apprenticeship program be offered the opportunity to remain in the maintenance force as a general mechanic (contingent upon a positive supervisor recommendation and the availability of an opening).

h. establish a senior general mechanic (PFS-6) position and fill it by mechanics who have shown exceptional ability to maintain electro-mechanical equipment even though they cannot meet MPE mechanic test entrance requirements.

Problem #4 Need for Improved Entrance and Promotion Examinations

1. Base entrance into and promotion within the MPE maintenance force in part on successful passage of examinations.

   a. require passing of the Apprentice Examination as one requirement for admission to the maintenance force as an MPE apprentice or as a general mechanic.

   b. require passing of the MPE Mechanic Examination as one requirement for promotion from MPE apprentice (PFS-6) to MPE mechanic (PFS-7).

   c. require passing of the Senior MPE Mechanic Examination as one requirement for promotion from MPE mechanic (MPE-7) to senior MPE mechanic (PFS-8).

   d. require passing of the Supervisor Examination as one requirement for promotion to a foreman position.

Problem #5 Need for an MPE Mechanic Apprenticeship Program

1. Establish a two-phase MPE mechanic apprenticeship program of approximately one year in length.

   a. entrance into the apprenticeship program would be based on passing the Apprenticeship Examination, or on a four year demonstration of electro-mechanical maintenance capability at the general mechanic level.

   b. trainees would serve a six month apprenticeship at the PFS-5 level during which they would be taught to perform all maintenance on one relatively simple type of MPE equipment.

   c. based on a satisfactory supervisory evaluation (plus, perhaps a "hands on" maintenance test) the apprentice, at the end of six months, would be promoted automatically to PFS-6.

   d. during the second phase of apprentice training the trainee would be taught to maintain a second type of relatively simple MPE equipment.

   e. based on satisfactory supervisory evaluation (plus, perhaps a "hands on" maintenance test) and passing of the MPE Mechanic Examination, the apprentice would be promoted automatically to the position of MPE mechanic, PFS-7 at the end of 12 months.

   f. successful completion of the apprenticeship program would be based in part on successful mastery of any classroom or self-instructional training which the POD considers to be an integral part of apprentice training.

Problem #6 Need for an In-House Training System for MPE Mechanics

See preceding recommendation regarding apprenticeship training.

1. The POD should continue with increased vigor its program for collecting self-study maintenance material which can be placed in office libraries.
2. Self-instructional maintenance training packages, similar to that developed by HumRRO Task SABER, should be developed for all major types of MPE equipment.

Problem #7 Need for Guidelines Regarding Specialization of MPE Mechanics

1. MPE mechanics should not be allowed to specialize on one or two types of MPE equipment unless they are content to remain at the PFS-7 level and in the position of MPE mechanic.
   a. The MPE mechanic, PFS-7 should be required to perform maintenance on at least two types of MPE equipment, and, in addition, be requested to learn a third type of equipment containing more sophisticated control circuits.
   b. The MPE technician, PFS-8 should be required to perform maintenance on at least three types of MPE equipment, and in addition, be required to become highly skilled at the maintenance of electromechanical control circuits.
   c. As required, especially in the small offices, the MPE mechanic should be required to maintain two to four types of non-MPE equipment.

Problem #8 Lack of Pay Comparability for MPE Mechanics

1. MPE maintenance positions should be up-graded by one grade based on a re-examination of skill and knowledge requirements for MPE mechanics.
2. MPE maintenance positions should be periodically evaluated and their PFS-levels be adjusted in accordance with latest job requirements.

Problem #9 Need for Full Utilization of MPE Mechanics

1. Journeyman mechanics should be given specific primary and secondary responsibilities.
   a. The primary responsibilities should be described in terms of the major types of MPE equipment which the mechanic will be required to maintain.
   b. The secondary responsibilities should be described in terms of:
      (1) maintenance duties relating to the performance of less demanding types of maintenance (RPMs) on additional types of MPE equipments; or
      (2) maintenance duties on non-MPE equipments.

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INTRODUCTION AND METHODOLOGY

Introduction

The major objectives of Task MPE were (1) to develop improved examinations for the selection of MPE (Mail Processing Equipment) maintenance personnel; and (2) to devise recommendations regarding the classification of MPE maintenance positions. As defined in the POD Maintenance Management Handbook (MS-10) mail processing equipment includes the new mechanized equipment such as the Tray Transport System, the Parcel Post Sorter machine, the Bulk Conveyor System, the Mark II Facer-Cancelers and the semi-automatic Letter Sorter. Task MPE was divided into two major subtasks which were conducted concurrently and in close cooperation with each other. One subtask dealt with the development of new entry and promotion examinations for MPE mechanics. The results of that subtask are presented in other reports.[1], [2]

This report is based on the subtask on classification which was concerned primarily with developing suggestions regarding the restructuring and re-evaluation of the job positions within the MPE maintenance organization. Recommendations also were developed regarding the in-house training of and the career development of the MPE mechanics.

The major products contained within this report are:

(1) A series of recommendations regarding a maintenance career ladder and promotion criteria for MPE mechanics

(2) Sample job descriptions describing the proposed duties and responsibilities for MPE and associated mechanics (Appendix A)

(3) Recommendations regarding an apprenticeship program for MPE mechanics

(4) A Job Analysis and Job Evaluation Form which can be used by managers and Compensation Officers to obtain detailed job descriptions for existing or new maintenance positions (Appendix B)

The major findings of the study are discussed within a description of nine problem areas which typically exist within most field office maintenance departments.

Method of Information Collection

The findings and recommendations of this report are based on the following information sources:

(1) Interviews with maintenance personnel from 17 mechanized post offices (the names of these offices are included as Appendix C).

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[1] The Development of Postal Maintenance Examinations (tentative title), by A. J. McKnight, et al., Human Resources Research Office, The George Washington University (in preparation).

[2] Analysis of Postal Maintenance Jobs (tentative title), by A. J. McKnight, et al., Human Resources Research Office, The George Washington University (in preparation).

(2) Maintenance Activity Questionnaires administered to over 1,000 mechanics in the mechanized offices and used to determine the job duties of postal equipment mechanics.

(3) Maintenance Supervisor Activity Questionnaires completed by Foreman, MPE mechanics at 17 mechanized offices and used to determine the duties of MPE maintenance foreman.

(4) Maintenance Assignment Checklist completed by Foreman, MPE Mechanics at the 17 surveyed offices and used to determine present job assignment practices.

(5) Job Evaluation Questions (Appendix D) used by MPE maintenance foreman to re-evaluate existing MPE maintenance positions.

(6) Discussions with Post Office Department personnel from the Employment and Placement Division, Bureau of Personnel; Compensation Division, Bureau of Personnel; and Maintenance Division, Bureau of Facilities.

(7) Analysis of material presented in Post Office Maintenance Handbooks--the MS series, the Personnel Handbook, P-1, and the Postal Manual.

MAINTENANCE PROBLEM AREAS

The major findings of this study have been incorporated into a discussion of nine problem areas which typically are found at mechanized offices. Following the discussion of each problem brief descriptions of recommended solutions are presented. In another section of the report the recommendations are discussed in greater detail. The problem areas discussed in this section are:

Problem #1 Decreasing Manpower Pool of Potential MPE Mechanics

Problem #2 Lack of Distinction Between MPE-6 and MPE-7 Mechanics

Problem #3 Need for an MPE Mechanic Career Ladder

Problem #4 Need for Improved Entrance and Promotion Examinations

Problem #5 Need for an MPE Mechanic Apprenticeship Program

Problem #6 Need for an In-House Training System for MPE Mechanics

Problem #7 Need for Guidelines Regarding Specialization by MPE Mechanics

Problem #8 Lack of Pay Comparability for MPE Mechanics

Problem #9 Need for Full Utilization of MPE Mechanics

Problem #1 Decreasing Manpower Pool of Potential MPE Mechanics

The Problem: There is a decreasing number of postal personnel qualified to enter the equipment maintenance force, and it is projected that post offices will experience increasing difficulty in staffing their equipment maintenance departments from within.

Background Information: When a typical post office was first mechanized, there were a number of persons on the maintenance force and in the clerk and carrier crafts who were interested in, and who had the potential for, becoming first rate mechanics. At most offices this manpower pool had to be supplemented by experienced mechanics procured from outside the post office--military retirees and mechanics seeking steady employment. These persons were able to pass the MPE entrance examination easily and upon entry into the maintenance force were readily able to learn to maintain most if not all MPE equipments. In many of the larger offices this manpower pool, which has been quite stable for some years, is nearly exhausted. Even in some of the smaller offices the eligibility register contains few persons who appear to have the qualifications to become acceptable MPE mechanics.

There are increasing indications that clerks and carriers are less inclined to transfer into the maintenance force; the clerks and carriers often can make more money through overtime work than they could by becoming part of the maintenance force. In addition, at most offices there are helpers and general mechanics on the maintenance force who could not pass the MPE entrance examination and therefore are not eligible to become MPE mechanics. These persons permanently fill "apprentice-level" positions.

Recommendations: Later sections of this report contain recommendations which should increase the potential pool of MPE mechanics. These recommendations include: (1) in recognition of the high skill and knowledge requirements for MPE mechanics, raise the PFS-level of these positions by one PFS-level; (2) provide training programs and procedures whereby, at each office, interested persons can

prepare themselves for the MPE examinations; (3) develop an apprenticeship training program for new MPE mechanics; and (4) provide for automatic promotion following successful completion of each stage of development in the apprenticeship training program.

Problem #2 Lack of Distinction Between MPE-6 and MPE-7 Mechanics

The Problem: In many mechanized offices there is practically no distinction between the duties and capabilities of MPE-6 and MPE-7 mechanics. This has led to considerable dissatisfaction on the part of the MPE-6 mechanics.

Background Information: According to POD job descriptions, the MPE-6 mechanic can perform preventive maintenance and can troubleshoot and repair the less sophisticated MPE equipments or portions thereof. The MPE-7 mechanic is described as a skilled troubleshooter who can perform the more complicated types of troubleshooting, repair or fabrication. In addition, the formal inspection of equipment is supposed to be reserved for the MPE-7 mechanic or the maintenance foreman. Also, the MPE-7 mechanic is supposed to function as a worker-leader or crew chief when the need arises.

In practice an equipment breakdown problem usually is assigned first to an MPE-6 mechanic with the instructions that if he cannot handle the problem within 15-30 minutes, he should report back to his foreman. The foreman then assigns an MPE-7 to the task or tries to handle the problem himself. As a result of this assignment practice an MPE-6 eventually learns to troubleshoot and repair practically all portions of a particular type of MPE equipment and sometimes becomes more skilled at this than the MPE-7 mechanic. Moreover, a high percentage of mechanical failures are not very difficult to locate and correct and therefore usually can be performed by a reasonably proficient MPE-6 mechanic.

It seems reasonable to expect the MPE-7 mechanic to maintain a wider variety of equipments than can the MPE-6 mechanic. In practice, however, such a requirement seldom exists. In the smaller mechanized offices both MPE-6s and MPE-7s often are older and experienced men who have a wide variety of maintenance skills and who have learned to maintain practically all types of postal equipment. In addition, both MPE-6s and MPE-7s may be competent on plant equipment such as air conditioners, air handling units, and elevators. A quite different situation exists within the larger offices. In these offices either the MPE-6 or the MPE-7 or both may be skilled on only one or two pieces of equipment, and in effect may be a rather narrow maintenance specialist. This specialization may even exist for the maintenance foreman.

With respect to the performance of equipment inspections, there seems to be little consistency in practice from office to office, and in the smaller offices it is fairly common to assign this activity to an MPE-6 mechanic.

During this study an attempt was made to identify maintenance actions, skills or knowledges which distinguished the MPE-6 from the MPE-7 mechanic. As determined by tests of electro-mechanical maintenance it does appear that the MPE-7 mechanic is necessarily more skilled and knowledgeable than the MPE-6 mechanic. In terms of present job assignment practices there appears to be little distinction between the MPE-6 and the MPE-7 mechanic. It is recommended that increased efforts be made to develop clear distinctions between maintenance positions. In particular, as the mechanic moves up the career ladder he should be required to acquire a greater maintenance capability and to assume broader responsibilities. Also, job assignments should be made in accordance with the requirements and expectations for each job position and grade level of mechanic.

Recommendations: Recommendations bearing on the above problem involve the restructuring of the job duties of higher level mechanics so that they are required to perform the more difficult maintenance actions and to perform these actions on a wider variety of equipments. The intent of these recommendations

is to prevent mechanics from becoming narrow specialists on the one hand, and on the other hand to prevent supervisors from requiring too much of their mechanics. Specific recommendations include the following: (1) that MPE-6 mechanics be able to perform all maintenance on two types of MPE equipment and that MPE-7 mechanics be able to perform all maintenance on three types of MPE equipment; (2) that the primary and secondary responsibilities of each MPE mechanic be described in terms of those equipments which he must learn how to maintain; and (3) that these responsibilities be specified in the individual mechanic's job description. It is assumed that these requirements will be different for different mechanics. This can ensure a full maintenance reaction capability on each tour, if required.

Maintenance job positions can be defined to establish distinctive differences between them. However, these differences cannot be maintained without the full cooperation of maintenance supervisors. In particular, maintenance foremen must be willing to assign to each mechanic only those duties and responsibilities which are specified in the mechanic's job description.

Problem #3 Need for an MPE Mechanic Career Ladder

The Problem: In the MPE maintenance force there is no well-defined career ladder. Promotion requirements and potential vary widely from office to office and, except for seniority, criteria for promotion are seldom clearly specified and/or utilized.

Background Information: Generally, the advancement potential for an MPE mechanic is limited. He can advance from MPE-6 to MPE-7 and then to MPE-Foreman but the opportunity for advancement is usually rare. Many mechanics feel that advancement to the foreman position is not worth the additional supervisory responsibilities nor the usual necessity for shifting to a less desirable tour.

Depending on the office he is in, an MPE-6 mechanic may be required to maintain only one or two pieces of equipment, or most if not all MPE equipments. However, his chances for promotion are not closely related to his skill or breadth of ability. Rather, advancement seems most closely related to his seniority, the number of allotted maintenance slots and the retirement or dropout rate of fellow mechanics. In rare instances, a mechanic can be promoted to an elevator mechanic, area maintenance officer, or a maintenance training officer. However, the probability of such an occurrence and the manner in which a mechanic should prepare himself for it, seldom is clear.

The development of a suitable career ladder for MPE mechanics depends upon broadening the MPE maintenance organization and upon developing reasonable field service-wide standards for advancement. In support of this statement a revised maintenance organization with new job descriptions has been developed and rules for promotion have been prescribed. These are discussed in the section of the report titled "Re-structuring of MPE Maintenance Department Jobs".

Recommendations: It is recommended that a maintenance career ladder be established which ranges from the PFS-4 helper position to the position of general foreman, MPE mechanic at the PFS-12 level. Specific recommendations incorporated within this career ladder concept include: (1) that two apprenticeship positions be established at the PFS-5 and 6 levels, and that three journeyman positions be established at the 7, 8 and 9 PFS levels; (2) that promotion from the apprenticeship 5 to the apprenticeship 6 level be automatic following successful completion of the first portion of apprenticeship training; (3) that successful completion of the second stage of apprenticeship training be followed by automatic promotion to the PFS-7 level; (4) that the essential difference between the PFS-7 and PFS-8 level positions be in terms of the requirement that the PFS-8 mechanic become a maintenance expert on a wider variety of MPE equipments; (5) that the PFS-9 position be designated an electro-mechanical maintenance technician position and incumbents required to be the office expert on at

at least two types of MPE equipments; (6) that persons failing the MPE apprenticeship training program be offered the opportunity to remain in the maintenance force as a general mechanic, PFS-5 (This offer would be based on a supervisory evaluation that the person in question was capable of maintaining lesser sophisticated electro-mechanical equipment); and (7) that a senior general mechanic position be established and filled by mechanics who have shown exceptional ability to maintain electro-mechanical equipment even though they cannot meet MPE mechanic test entrance requirements. These recommendations are discussed in more detail later in the report.

Problem #4 Need for Improved Entrance and Promotion Examinations

The Problem: Currently, a three part entrance examination is used to qualify POD mechanics at the entry level. This examination is in need of revision to make it more work-relevant. In addition, promotion qualification examinations need to be developed since presently there are none.

Background Information: A major objective of Task MPE was to revise the maintenance entrance examinations. New entrance examinations have been developed and promotion tests have also been developed. At present, if the potential mechanic passes only the mechanical portion of the three-part entrance test (mechanical, electro-mechanical, electronic) he is eligible to become a general mechanic. If he passes all three portions of the test he is eligible to become an MPE mechanic. At present there are no tests to determine a person's qualifications for promotion from MPE-6 to MPE-7. There is an MPE foreman qualification examination; this has been revised as part of Task MPE.

Task MPE has developed an apprenticeship test (The Apprentice Examination) which can be used to select persons for entry into the maintenance force as general mechanic or as apprentice MPE mechanics. An intermediate or subjourneyman test (The MPE Mechanic Examination) has been developed which can be used to assess the promotability qualifications of present MPE-5 mechanics, or to determine the promotion qualifications of advanced MPE apprentices (PFS-6) to MPE Mechanic, PFS-7 (Proposed Grades). A journeyman test (The Senior MPE Mechanic Examination) has been developed which can be used to determine qualifications for promotion from MPE-6 to MPE-7 (Present Grades) or from MPE-7 to MPE-8 (Proposed Grades). Finally, a new supervisory qualification test (The MPE Maintenance Supervisor Examination) has been developed. These tests along with supervisory evaluations and an apprenticeship training program can provide a more objective means for evaluating a mechanic's qualifications for advancement.

The development of, and recommendations regarding the use of, entrance and promotion maintenance examinations are fully discussed in another MPE report[1].

Recommendations: It is recommended that: (1) passing the apprenticeship examination be one requirement for admission to the maintenance force as an MPE apprentice or as a general mechanic; (2) passing of the MPE Mechanic Examination be one requirement for advancement from MPE apprenticeship to MPE mechanic (PFS-7); (3) passing the Senior MPE Mechanic Examination be one requirement for promotion from MPE Mechanic (PFS-7) to senior MPE mechanic (PFS-8). These recommendations are based on the proposed new MPE job positions and grade structure described later in the report.

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[1] The Development of Postal Maintenance Examinations (tentative title), by A. J. McKnight, et al., Human Resources Research Office, The George Washington University (in preparation).

It is extremely difficult to develop a paper and pencil examination which can satisfactorily assess ability to perform or to learn equipment maintenance. A performance examination would be a more suitable assessment device. A still better procedure would be to put potential mechanics through an apprenticeship program because an apprenticeship program is, in effect, a lengthy performance test. The four new maintenance examinations developed as part of Project MPE are a definite improvement over what currently exists. However, even these new maintenance examinations should eventually be replaced by a structured performance testing program. Such a testing program could be incorporated into the apprenticeship training program and could also be used to determine the promotability of journeyman mechanics.

Problem #5 Need for an MPE Mechanic Apprenticeship Program

The Problem: There is a need to develop a formal apprenticeship program to train new MPE mechanics, to determine which apprentices have the capability to become journeyman MPE mechanics, and to qualify them for full career progression.

Background Information: During this study many maintenance foremen and supervisors expressed interest in a formal apprenticeship program for mechanics. Currently the method of training new mechanics varies widely from office to office. Specific guidance and goals or standards to be met do not exist. At the larger offices something approximating a standard three to six months apprenticeship program occasionally is conducted. At the smaller offices, a new mechanic is taught on the job by other mechanics or by his foreman.

Currently, MPE mechanics go through a 90 day probationary period during which their potential is evaluated by their supervisors. Most maintenance supervisors indicated that it is extremely difficult to evaluate the potential of a new mechanic within this 90 day period. Rather, they wished to see this probationary period extended to a minimum of six months and preferably to 12 months. This extension can be accomplished effectively through a formal apprenticeship program.

Recommendations: It is recommended that a two stage apprenticeship training program for MPE mechanics be established. The specific recommendations associated with this program are: (1) entrance into MPE apprenticeship program would be based on passing the Apprentice Examination or a four year demonstration of electromechanical maintenance capability at the general mechanic level; (2) the trainee would serve a six month apprenticeship at the PFS-5 level during which he would be taught to perform routine preventive maintenance (RPM) and repair on at least one type of MPE equipment; (3) based on a satisfactory supervisory evaluation, the apprentice, at the end of six months, would be eligible for promotion to the PFS-6 level; (4) during a second six months the advanced apprentice would learn such things as how to read schematics and engineering drawings and how to perform routine preventive maintenance and repair on additional pieces of MPE; (5) at the end of a 12 month period, the apprentice would be eligible to take the MPE Mechanic Examination and would be evaluated by his supervisor with respect to his ability to repair and perform routine PM on the equipment covered by the apprenticeship program. Passing the examination and receipt of a satisfactory supervisory evaluation would result in automatic promotion to the PFS-7 Junior Journeyman level.

It would be expected that some apprenticeship trainees would not demonstrate potential for becoming satisfactory journeyman mechanics. These trainees could be given the option of returning to their former POD positions. As an alternative, they could be allowed to remain in the maintenance force as general mechanics provided they were evaluated as having suitable mechanical maintenance skills and knowledges to serve in that position.

At almost every mechanized office there is one or more mechanics who are considered quite capable even though they have not been able to pass the MPE entrance exam. Also, at many of these offices instances can be cited where people have

entered the maintenance force after scoring high on the entrance exam and yet have demonstrated little ability to work on actual equipment. Both of these situations are undesirable.

A short range solution to the problem could be based on the combined use of the newly developed maintenance examinations and an apprenticeship program. Persons entering the maintenance force could be required to pass the Apprentice Examination and then progress through the apprenticeship program. Near the completion of their apprenticeship they would be required to pass the newly developed MPE Mechanic Examination.

For those general mechanics now within the post office and who have not been able to pass the present MPE examination, a different approach could be followed. The general mechanics could be administered the new Apprentice Examination and if they obtained a passing score they would be allowed to enter the apprenticeship program. Those who could not pass the Apprentice Examination, but who had demonstrated their maintenance ability would, on the basis of supervisors recommendation, be allowed to enter the MPE apprenticeship program. Here they would have a year in which to demonstrate that they could learn to maintain additional types of MPE equipment and could learn the skills and knowledges required to pass the MPE Mechanics Examination

Using the above procedures persons who are able to pass examinations but not necessarily able to maintain equipment would receive the same one year apprenticeship program. This would provide enough time to evaluate properly their maintenance potential.

A long range solution to the above problem would involve eliminating, wherever possible, the use of paper and pencil examinations. Equipment maintenance performance examinations could be prepared and entrance into the apprenticeship program as well as all subsequent advancements could be based on demonstrated capability.

Problem #6 Need for an In-House Training System for MPE Mechanics

The Problem: Most post offices do not have the material nor the facilities to conduct a complete training program for mechanics. This situation should be improved because, in the future, post offices will have to make an increased effort to train their own mechanics.

Background Information: The Post Office Department has become aware of the need for providing training and technical material to its maintenance force. Maintenance handbooks have been developed for major pieces of postal equipment. Training programs have been developed for these equipments and a pilot study has been initiated to determine the feasibility of providing self-study training material for mechanics. These efforts have established a favorable trend which if continued should provide the means for upgrading post office mechanics. In particular, it is desirable to provide material which can be used by helpers, general mechanics, and clerks and carriers to prepare themselves for the mechanic examinations. It may well be that a fairly high percentage of helpers and general mechanics can qualify as MPE mechanics provided that they are given adequate opportunity to increase their understanding and skill regarding the maintenance of electro-mechanical equipment. It is not recommended that entry qualifications into the MPE apprenticeship program should be lowered. Rather, the opportunity for meeting these entry requirements should be increased so that with some exceptions those persons who have the desire and capability to do so can eventually meet the MPE entry requirements.

Journeyman mechanics often have to learn on their own how to maintain certain postal equipment. This may be because no school exists for that equipment or because the mechanic does not have an opportunity to attend the school. In any case it is desirable, for major types of postal equipment, to prepare self-study training packages which can be placed in office libraries. The training packages, with an integrated progress testing system would provide the means by which the

apprentice and the mechanic could meet promotion qualifying standards. Some amount of time during the working day should be provided for the self-study of this material.

Recommendations: The recommendations regarding the development of an apprenticeship training program are highly relevant to the above problem. In addition, providing self-study training material to be placed in libraries at the local post office is a very practical and effective approach. These packages can provide the training guidance, goals and standards required by the apprenticeship program.

Problem #7 Need for Guidelines Regarding Specialization of MPE Mechanics

The Problem: At some offices MPE mechanics specialize on one or two types of equipment. At other offices mechanics must learn to maintain a wide variety of equipments. There are no clear guidelines regarding maintenance specialization and therefore the duties for similar job positions may vary widely both within and between offices. The result is "equal pay for unequal work".

Background Information: According to his job description an MPE mechanic should be able to maintain all MPE equipment, and, in addition he may be asked to maintain other types of non-MPE equipment such as electric trucks, elevators, and twine and wiring tying machines. This is too broad a requirement; it is doubtful if any one mechanic can become expert at maintaining all types of MPE equipments. Further, diverting the MPE mechanic from MPE maintenance tasks results in: (1) inefficient utilization of manpower; (2) disruption of planned MPE maintenance schedules; (3) dilution of the MPE mechanic's capability to maintain sophisticated MPE equipment; and (4) disgruntlement on the part of the MPE mechanic. At the other extreme, in the larger offices there is a tendency for a mechanic to be assigned to only one or two types of equipment. In such offices, aside from intrinsic rewards, there is no reason for a mechanic to exert himself to learn how to maintain a wide variety of equipments.

There is no present requirement that an MPE mechanic PFS-7 be able to maintain a wider variety of equipments than the MPE mechanic PFS-6. Rather, the MPE-7 mechanic is supposed to be able to perform the more sophisticated types of maintenance. In practice this distinction does not exist because, through consistent assignment of a mechanic to one type of equipment, that mechanic eventually learns how to perform all types of maintenance on that equipment. Conceivably MPE and associated equipment could be divided into two categories representing relatively simple and relatively complicated MPE equipment respectively. The MPE-6 mechanic then could be assigned to maintain equipment in the relatively simple category, reserving the more complicated MPE equipment for the MPE-7 mechanic. At present there is a slight tendency towards this approach in practice, but there is no formal policy pertaining to it.

It would be appropriate to arrange job position requirements so that the higher grade positions would require the ability to maintain more complicated equipment and to maintain more types of equipments. This concept has been incorporated into the career ladder recommendations and the recommended job descriptions provided in this report.

It is proposed that the junior apprentice learn to perform routine preventive maintenance (RPM), adjustments, and troubleshooting and repair actions on one relatively simple type of MPE equipment. The advance MPE apprentice would learn RPM, troubleshooting and repair actions for a second type of relatively simple MPE equipment. At the end of his apprenticeship the trainee should be able to handle all but the most complicated troubleshooting problems on two types of MPE equipment. Which MPE equipments each apprentice learns to maintain could be left to the discretion of management.

Because of the nature of the apprenticeship training, the 7-level MPE journeyman would be able to perform all maintenance on two of the major types of MPE equipment. The PFS-8 MPE mechanic would be required to perform all types of maintenance on three major types of MPE equipment. Maintenance on the third type of MPE equipment would be learned as part of the PFS-7 job requirements. The 9-level MPE technician would be the maintenance expert for his post office on at least two types of MPE equipments.

Recommendations: It is recommended that different PFS levels of maintenance positions be distinguished partly on the basis of requiring higher-level positions to maintain a wider variety of MPE equipments. Secondly, it is recommended that the Post Office Department develop and publish a suggested list of MPE equipments and/or equipment components which should be maintained by junior mechanics.

Problem #8 Lack of Pay Comparability for MPE Mechanics

The Problem: There is evidence to suggest that the pay levels of MPE mechanics are lower than those for mechanics performing similar work in non-postal agencies.

Background Information: Many mechanics interviewed during this project felt that they were underpaid. Those who had been in the postal service 10 or more years usually felt that it was not to their advantage to switch to outside employment. There is some reason to believe that the position of post office mechanic is becoming less attractive to the younger postal employees. For example, informal evidence suggests that it is the young MPE mechanic who leaves the post office after one or two years of service on the maintenance force. In addition, there is tentative evidence that it is the young mechanic who is meeting the entrance requirements for electronic technician positions and who after receiving his post office training, leaves the postal system.

The degree to which the MPE mechanic's pay is comparable to his outside counterpart depends upon a number of factors. In some larger cities such as Chicago and Detroit there is much industry and mechanization and therefore the demand for mechanics is high. In these cities post offices have difficulty attracting and keeping good mechanics. In cities such as Washington, D.C. and New York there is a lesser amount of mechanization within the city limits and, relatively speaking, the job of post office mechanic is a good one.

In comparison with the positions of clerks and carriers, the MPE-6 and MPE-7 mechanics may not benefit financially even though they are one or two grades higher. This is because, with rare exceptions, mechanics receive little, if any, overtime pay.

The new MPE equipment places increased skill and knowledge demands upon the post office mechanic. The mechanic's job is not nearly as simple as it was sixteen years ago when the postal system PFS levels were established. The Conveyor Mechanic, Postal Machine Mechanic, Letter Box Mechanic, Vending Machine Mechanic and the Carpenters, Painters, and Plumbers are all classified at the PFS-6 level, along with the MPE-6 Mechanic. In terms of complexity of assigned tasks and equipment, none of these necessary maintenance positions are comparable to the MPE mechanic. In all probability a re-examination of all jobs within the post office would show that equipment maintenance positions should be upgraded. This may apply to plant maintenance and automotive maintenance positions as well as MPE maintenance positions.

During this study an attempt was made to estimate the extent to which the PFS levels of present maintenance positions should be upgraded. To do this five equipment maintenance positions were evaluated using the job evaluation criteria originally used as an aid in establishing the PFS levels. These criteria were not especially appropriate to mechanic positions since they place too much emphasis on numbers of persons supervised and too little emphasis on education and experience requirements. In any case, using these criteria, and

while under close supervision, a total of 7 MPE foremen were asked to evaluate the positions of mechanic helper, general mechanic, MPE-6 mechanic, MPE-7 mechanic, and Foreman, MPE mechanics. The results of this evaluation suggests that the PFS level for each of the above positions should be raised by one PFS level. (See section titled "Classification of Post Office MPE Maintenance Positions" for additional information.)

Changes in postal equipment and operating conditions will change the requirements of maintenance jobs and it would be appropriate to re-evaluate jobs in terms of these changes every few years. In some cases such a re-evaluation might indicate the need to downgrade a position. For example, the new electronic technician position grade is based on the assumption that much training and skill is required to troubleshoot and maintain electronic equipment. This is so at present, but may not be so in the future. Future electronic equipment might be designed to make it relatively simple to troubleshoot and to maintain. Conceivably, in the near future new postal electronic equipment could be maintained by a general mechanic, utilizing automated malfunction detection equipment.

Recommendations: Based on a re-examination of the skill and knowledge requirements for MPE mechanics, it is recommended that MPE maintenance positions be upgraded by one grade. This recommendation has been incorporated into the proposed career ladder for MPE mechanics.

Problem #9 Need for Full Utilization of MPE Mechanics

The Problem: In small and medium sized mechanized offices it is difficult to keep mechanics fully utilized unless they can be assigned to a wide variety of equipments and maintenance activities.

Background Information: From the point of view of the maintenance supervisor, it is advantageous to have mechanics who can maintain a wide variety of equipments. This makes it easy to assign personnel to maintenance problems. Without mechanics possessing broad maintenance capability the Director of Maintenance must make a more detailed analysis of his maintenance requirements and then staff each tour with specialists in accordance with anticipated requirements for that tour. While the ultimate result of this should be more efficient maintenance and utilization of personnel, it could require more personnel.

In all but the largest mechanized offices maintenance personnel can be fully utilized only when they can maintain a variety of equipments. Typically an MPE mechanic will be asked to perform some type of maintenance on two or more types of MPE equipments. In addition, he will be asked to perform maintenance on a number of small postal equipments and/or materiel handling equipments. In practice a mechanic has both primary and secondary equipment maintenance responsibilities and it would seem appropriate to formally recognize this in specific job descriptions, but not in the standard position.

Recommendations: It is recommended that journeyman mechanics be given specific primary and secondary maintenance responsibilities. Primary responsibilities would consist of specifying two or three pieces of MPE equipment for which the mechanic was fully responsible in terms of being able to perform all types of maintenance on that equipment. Secondary responsibilities might consist of two types: those relating to performing less demanding types of maintenance (RPMs) on additional types of MPE equipment; and those relating to the performance of maintenance on relatively simple non-MPE equipment, as required. Such job requirements would give formal recognition to the situation which typically exists within a maintenance force; any one mechanic is especially skillful on only one or two types of major MPE equipments but is adequate on two or more additional types of equipment.

RE-STRUCTURING OF MPE MAINTENANCE DEPARTMENT JOBS

Creation of New Job Positions

Figure 1 shows the titles and PFS levels for those job positions which are recommended for inclusion in an MPE maintenance department. At least three of these positions do not currently exist--the positions of Senior General Mechanic, MPE Apprentice, and MPE Technician. In addition, it is recommended that the position of Training Officer, MPE be established at the larger post offices. In any post office without an MPE Training Officer the pertinent training activities and records responsibility should rest with the Director, Office of Maintenance. The establishment of these additional job positions will offer better opportunities for the career development of MPE mechanics, and satisfy the need for qualified personnel.

Primary versus Secondary Job Requirements

There are a number of types of small postal equipment and materiel handling equipment which are repaired equally often by general mechanics and by MPE mechanics. These equipments include the portable power conveyor, cancelling machines, twine tying machines, wire tying machines, the mechanical portion of elevators, electric trucks and tractors, fork lifts, electric scooters, and clocks. These equipments are similar in terms of their relatively simple electro-mechanical characteristics. Such equipment should be maintained exclusively by general mechanics. In addition, the mechanical portions of conveyors and sorters could be maintained by general mechanics.

In the larger offices there will be enough MPE equipment to keep MPE mechanics profitably occupied full-time. In smaller offices this might not be the case. In these smaller offices it would be desirable to assign MPE mechanics the secondary responsibility of maintaining certain pieces of non-MPE equipment. The more electro-mechanically sophisticated non-MPE equipment should be assigned to the MPE mechanic, reserving the remainder for the general mechanic or for other maintenance positions such as the postal machine mechanic or the maintenance electrician.

New Job Duties and Responsibilities

As discussed previously, it is difficult to distinguish between an MPE-6 and an MPE-7 mechanic, and it was suggested that the requirements for holding various maintenance job positions should be more clearly specified. For the job positions shown on Figure 1, job descriptions have been prepared for all positions except those dealing with electronic maintenance and the general foreman. These position descriptions are contained in Appendix A. In this section the important features of the general mechanic and MPE maintenance positions will be summarized.

The position descriptions for helper and general mechanic are not substantially different from those now used by the post office. As defined here, the general mechanic is one who can perform most types of repairs on simple mechanical and electro-mechanical equipment. Generally, he is a person who has not met the qualifications to serve as an apprentice MPE mechanic.

The position of Senior General Mechanic is a new position. Persons holding this position would be backup troubleshooting and repair experts for simple mechanical and electro-mechanical equipment. In essence, this position is a

RECOMMENDED TITLES AND PFS-LEVELS FOR PROPOSED MPE AND ASSOCIATED MAINTENANCE POSITIONS

PFS-12		General Foreman, MPE Mechanics	
PFS-11		Training Officer, MPE Mechanics	Senior Electronic Technician
PFS-10		Foreman, MPE Mechanics	Electronic Technician
PFS-9		MPE Maintenance Technician	
PFS-8		Senior MPE Mechanic	Apprentice Electronic Technician
PFS-7		MPE Mechanic	
PFS-6	Senior General Mechanic	Apprentice MPE Mechanic	
PFS-5	General Mechanic	Apprentice MPE Mechanic	
PFS-4	Mechanic Helper		

Figure 1

reward for those few general mechanics who have demonstrated outstanding maintenance ability and yet who have not been able to meet the MPE apprenticeship requirements.

Turning now to the MPE positions, the MPE apprentice position is new and should serve a very useful role in the development of MPE mechanics. The apprenticeship position would consist of a year long training assignment divided into two phases of approximately six months each. In the initial phase the new MPE mechanic, PFS-5 would learn to perform RPM's and simple troubleshooting and repair procedures on one of the simpler types of mail processing equipments--the LSM, the bulk conveyors, or the mechanical portions of the sack or parcel sorters.

The apprentice would be expected to advance to the second phase within a certain period of time, perhaps six months, or revert to the position of general mechanic, or leave the maintenance force. The apprentice would receive a one-grade promotion to PFS-6 after demonstrating satisfactory maintenance capability on the MPE equipment just studied. During the second phase of his apprenticeship, the trainee would be expected to learn the RPM and simple troubleshooting and repair procedures for a second type of mail processing equipment. After approximately six months of additional training, the apprentice would be expected to qualify for advancement to the position of MPE mechanic, PFS-7 by demonstrating his capability on both systems studied during his apprenticeship.

The position of MPE mechanic (PFS-7) is fairly similar to the current MPE-6 mechanic position. Persons holding this position would be expected, at minimum, to be able to perform all but the most complicated types of troubleshooting and repair activities on two types of MPE equipments. As a secondary job requirement they could be expected to learn how to perform routine maintenance on three or four relatively simple types of postal equipment depending upon the staffing requirement of any facility.

The position of senior MPE mechanic (PFS-8) would be similar to the present MPE-7 mechanic except that the minimum requirements for the position would be raised. At a minimum, the senior MPE mechanic would be required to perform all types of maintenance on at least three types of MPE equipments to include at least one type having sophisticated electrical controls--Letter Sorters or Mark II Facer Cancelers. As conceived here, the essential difference between an MPE mechanic and a senior MPE mechanic would be the ability of the senior MPE mechanic to troubleshoot sophisticated electro-mechanical equipment and in particular, to troubleshoot and repair electro-mechanical control circuits. In addition, the senior MPE mechanic would be expected to be skilled at maintaining at least three types of MPE equipment while the MPE mechanic would be required to maintain only two types of MPE equipment. Also as required, the senior MPE mechanic would function as a worker-leader or crew chief. In the small offices the senior MPE mechanic might be the senior maintenance man on the first or third tours.

As part of his job responsibilities the MPE mechanic, PFS-7 would be expected to study and become qualified to perform maintenance on a third type of MPE equipment. The equipment would be selected jointly by the mechanic and his supervisor.

The position of MPE technician, PFS-9, has no existing counterpart. As conceived here this position would be filled by a person who is highly qualified technically on at least three types of MPE equipment. This person would be his office backup maintenance expert. In his equipment specialities he would be expected to be more qualified than his foreman. While he could normally work the second tour he would be on call twenty-four hours a day. For equipments within his speciality, he would be expected to oversee equipment relocation; oversee the installation of additional pieces of equipment; provide technical guidance and instructional support to the MPE training officer; provide suggestions to and implement any equipment redesign suggestions authorized

by the postal plant engineer. The MPE technician would perform the formal equipment inspections and/or would function as the equipment maintenance quality control expert.

As conceived here the foreman, MPE mechanics (PFS-10) would perform similarly to what is currently described for MPE forman; it is proposed, however, that the MPE foreman should be relieved of some of the technical duties which he now has. In some offices the foreman is the backup maintenance expert for most, if not all, maintenance problems. When this is the case, the foreman cannot properly carry out his supervisory activities. For this reason it is suggested that for those offices which have more than 30 MPE and general mechanics, at least some of the foreman's technician duties be assumed by the MPE technician. In the smaller offices (under 30 MPE mechanics and general mechanics), it is suggested that this senior technician role be shared in the following manner: one MPE technician position be established to handle the two or three sophisticated types of MPE equipment, and each MPE foreman be required to become the post office expert on one or two of the remaining types of MPE equipments.

The position of maintenance improvement officer now exists in a few of the larger offices. Where they exist, these positions have an important training function. It would be appropriate to recognize these positions for what they are and call them by the title of training officer, MPE. It is recommended that this position be established at all offices having a maintenance force of 130 or more persons (see organizational charts associated with paragraph 1.531 of MS-10).

The position of training officer, MPE would be an extremely important position in those offices which have a fairly large turnover of mechanics. In addition, the position can be established in those offices, (e.g. Detroit) which have been assigned as a training office for a particular type of MPE equipment. The duties and responsibilities for this position would be similar to those which the post office now prescribes for MPE training officers.

The positions of general foreman, electronic technician apprentice, electronic technician, and senior electronic technician are positions which currently exist within the post office. These positions were not studied as part of this project.

Treatment of General Mechanics

It is difficult to establish a reasonable relationship between general mechanics, MPE mechanics and those other mechanics who make up the total equipment maintenance force for a post office. The Post Office Department has a wide variety of relatively simple equipment which can be maintained by lesser skilled mechanics.

As intimated above (and discussed more fully later in this report), the general mechanic and the senior general mechanic would be persons who could not meet MPE mechanic requirements. Such persons might feel more comfortable "buried" somewhere in the MPE hierarchy than being exposed as a somewhat conspicuous offshoot. An alternative might be to parcel out general mechanic functions among the mechanic helpers and the MPE-7 mechanics.

The circumscribed nature of Project MPE permitted an identification of the "general mechanic" problem but did not permit a study of problems associated with other maintenance job positions such as the mail box mechanic, the conveyor mechanic, the postal machines mechanic and the vending machine mechanic. In larger offices these "other" positions are located within the building and equipment maintenance section. In the smaller offices both they and MPE positions are integrated into a mechanical maintenance section. A study which examined all building and equipment maintenance positions within the post office would undoubtedly develop a more satisfactory scheme for handling general mechanics, and of course would have the opportunity to examine and develop career ladders for other maintenance positions.

PROPOSED CAREER LADDER FOR MPE AND ASSOCIATED MECHANICS

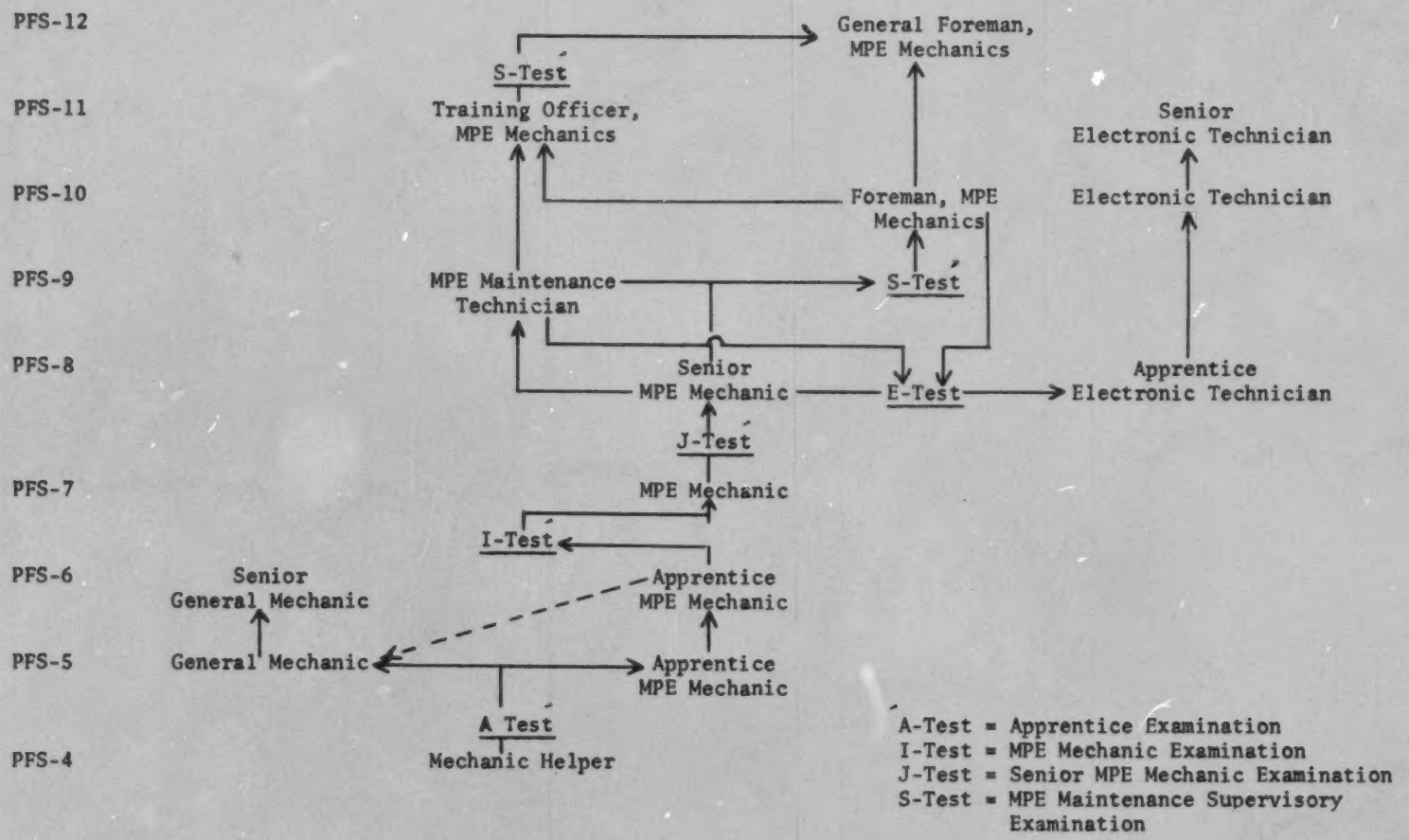

Figure 2

MAINTENANCE CAREER LADDERS

One of the main reasons for proposing the creation of additional positions within the MPE maintenance department is to establish a more definitive career ladder for MPE mechanics. The recommended career ladder for MPE mechanics is depicted in Figure 2.

As seen from Figure 2 the MPE mechanic career ladder is divided into three branches, a general mechanic branch (left side of the diagram), an MPE mechanic branch (center of the diagram), and an electronic technician branch (right side of Figure 2). No attempt has been made to show the relation between MPE and other types of mechanics (small postal machine mechanics, for example) nor has an attempt been made to spell out the relationship between MPE mechanics and all of the speciality mechanic positions which might exist in the larger post offices. Rather, a relatively simple career ladder has been proposed which will fit most mechanized offices.

A new mechanic would begin his maintenance career as a helper, a general mechanic or an apprentice MPE mechanic. He could enter the force as a helper without passing an entrance examination. Entrance requirements would be identical to those now employed for selection of mechanic helpers.

General Mechanic Career Ladder

Entrance into maintenance force as a general mechanic or as an apprentice would be contingent upon passing the newly developed apprenticeship examination. This test of electro-mechanical skills and knowledges does not specifically require familarity with postal equipment. A high test score would qualify the applicant for appointment to the MPE apprenticeship program. Persons scoring less well could be qualified to join the maintenance force as a general mechanic, assuming that a slot was available.

In the larger offices it may be economical to have a fairly large force of general mechanics who perform maintenance on the simpler types of mechanical equipment. In the smaller offices this type of maintenance can be performed by the MPE mechanics. Assuming the existence of a general mechanical force, an especially well qualified general mechanic would be eligible for promotion to senior general mechanic. Promotion would be based primarily on evidence of superior maintenance capability on simple mechanical and electro-mechanical equipment. The number of general and senior general mechanics might be in the order of five to one.

Currently in many post offices there are one or more general mechanics who have not been able to pass the entrance requirements to become MPE mechanics. It is suggested that those persons who have performed four years of satisfactory maintenance work be allowed to enter the MPE apprenticeship program. In this way they would be given the opportunity to demonstrate whether or not they can learn to be MPE mechanics.

MPE Career Ladder

Those persons who can pass the Apprentice Examination would be eligible to serve as MPE apprentice. It is suggested that the initial phase of apprenticeship training be for six months. During this time trainees would learn to maintain one of the simpler types of MPE equipment. Successful completion of this six months of apprenticeship training would be based primarily on supervisory

evaluation and satisfactorily passing a technical test on the equipment studied. Success would lead to an automatic promotion to the PFS-6 grade. Those persons who could not successfully complete the first phase of the apprenticeship program could be given the option of reverting to the position of general mechanic or of leaving the maintenance force.

The advanced apprentice would receive an additional six months of training during which he would learn to maintain a second type of MPE equipment. In addition, during the entire year of apprenticeship the trainee should receive training on such topics as schematic reading and basic electricity. This would prepare the apprentice to comprehend the technical material which he would be dealing with as a journeyman mechanic. As evidence that he had learned this material to minimum standards he would be required to take the newly developed MPE Mechanic Examination at the end of his senior apprenticeship. Passage of this examination, a favorable supervisory evaluation, and a passing grade on a technical test covering the second type of equipment studied during the apprenticeship would entitle the apprentice to automatic promotion to the PFS-7 level and the title of MPE mechanic.

From time to time openings will become available for the position of senior mechanic MPE. It is recommended that promotion to this position be based in part on the ability to obtain a passing score on the newly developed Senior MPE Mechanic Examination. Then the appointee should be given a certain period of time, perhaps three months, to learn his new job assignments. If he shows evidence that he can indeed learn to maintain new and more sophisticated types of MPE equipment then he can be appointed permanently to the position of senior mechanic MPE. In short, it is recommended that a position of senior mechanic, MPE be filled by the temporary appointment of an MPE mechanic. The appointment can become permanent after the temporary appointee demonstrates evidence of suitability for his new position.

The senior mechanic, MPE would be expected to perform all types of maintenance on at least three types of MPE equipment. In addition, the senior MPE mechanic would be expected to function as a worker-leader when that became desirable.

The senior mechanic, MPE will in all probability know at least one or two pieces of MPE equipment especially well, perhaps better than any other mechanic in his office. Assuming that he has evidenced this exceptional capability, he would be eligible for promotion to the position of MPE technician should that position be created or become vacant. In addition, the senior mechanic, MPE would be eligible for promotion to foreman MPE assuming that he met the supervisory examination test requirements and any other requirements established by the POD.

To complete the career ladder, the MPE technician or the MPE foreman would be eligible for the position of training officer, MPE. Persons holding this position should have a demonstrated interest and capability in teaching others. The position of general foreman should be filled from the ranks of MPE foreman or by a training officer who previously had been MPE foreman.

For those offices eligible to have electronic technician positions, these positions should first be filled from the ranks of those journeyman MPE mechanics who have passed the electronic examination.

According to the above career ladder all successful MPE trainees would, as a minimum, be paid at the PFS-7 level. This is in keeping with job evaluation data which was collected as part of this study and which will be described later on.

One important factor to consider when designing a maintenance career ladder is an estimate of the proper numerical relationship between junior and senior mechanics. While this is a difficult judgment to make it is suggested here that the numerical relationship between MPE mechanic, senior MPE mechanic and MPE technician be on the order of ten to five to one.

As a final point, it should be stressed that it is not enough to develop career ladders and then file them away in administrative manuals. These career ladders should be publicized; the rules for promotion should be publicized; and above all, the promotion rules should be administered in an objective and impartial fashion. A mechanic should know what his chances for promotion are and what he must do to merit promotion.

Distinction Between MPE-7 and MPE-8 Mechanics

As conceived here, the MPE mechanic (PFS-7) would be similar to the present MPE-6 position. Persons in this position would be required to perform all maintenance on at least two pieces of MPE equipment. These would be the electro-mechanically simpler types of MPE equipments.

The senior MPE mechanic (PFS-8) position would be similar to the present MPE-7 position. The senior MPE mechanic would be expected to perform all maintenance on at least three pieces of MPE equipment. More importantly, the senior MPE mechanic would be expected to be capable of maintaining those equipments which have complicated electro-mechanic control circuits.

The basic distinction between an MPE-7 and MPE-8 mechanic concerns the capability to maintain electro-mechanical control circuits. This distinction could be maintained in one of two ways. The MPE-8 mechanic could maintain the electro-mechanical control circuits of all MPE equipments leaving all other maintenance to the MPE-7 mechanic. This alternative is not favored by most maintenance supervisors because it divides maintenance responsibility between at least two persons. The favored alternative is to assign the simpler types of MPE equipment to the MPE-7 mechanic and require him to maintain all portions of the equipment. While serving as an MPE-7 mechanic the maintenance man would be given the opportunity to learn to maintain the more complicated types of control circuits. This would prepare him for the position of senior MPE mechanic.

TRAINING OF MPE MECHANICS

Apprenticeship Training

Earlier in this report the study findings were discussed with respect to the need for an MPE apprenticeship training program. The Post Office Department already has recognized the need and has instituted certain pilot training programs which in part will meet this need.

Apprenticeship training should be geared to produce mechanics who can meet specified job requirements. Therefore, one of the first apprenticeship program requirements is to specify the capabilities to be expected of the mechanic once he has successfully completed apprenticeship training. According to the career ladder diagram shown in Figure 2 the successful apprentice mechanic would be promoted to MPE mechanic at the PFS-7 level. Persons in this job position would be expected to perform RPMs and all but the most complicated types of troubleshooting and repair on at least two of the lesser sophisticated types of MPE equipments. These persons would be expected to perform a wide variety of mechanical and electrical mechanical maintenance and would be expected to learn how to troubleshoot electrical and electro-mechanical control circuits. In addition, the MPE mechanic (PFS-7) would be expected to comprehend the technical material related to his maintenance assignments; to comprehend maintenance charts, wiring diagrams, schematics and drawings; and to be capable of properly employing all of the tools and test equipments required of his maintenance assignment.

Upon entrance into the apprenticeship program the trainee would be expected to possess a certain amount of maintenance knowledges and skills. However, he might have little capability to read maintenance diagrams or engineering drawings, and his maintenance technical vocabulary might be limited. Also, he may lack certain maintenance skills and knowledges which are of special relevance to the maintenance of MPE equipment. And of course, he would not know how to maintain MPE equipment.

The goal of apprenticeship training should be to prepare a mechanic to perform most of the maintenance on at least two types of MPE equipment and to comprehend material associated with maintenance of this equipment. An additional objective should be to teach the trainee basic knowledges relating to electromechanical equipment maintenance to prepare him to learn to maintain the more sophisticated types of MPE equipments. Also we have recommended that the apprentice be required to pass the MPE Mechanic Examination before promotion to the position of MPE mechanic. Therefore, apprenticeship training should prepare the man for this test.

Training Techniques and Procedures

Some offices now have a type of apprenticeship training. These offices wait until they have openings for at least three or four mechanics, then the new mechanics are taught as a group for several weeks. This training is given on the second tour and includes both on-the-job training and classroom instruction. Such a planned sequence of formal and on-the-job training is far superior to an informal training program consisting primarily of on-the-job training. New training media such as programed instruction and audio-visual methods should be thoroughly explored and utilized in developing training materials for all MPE equipments.

Promotions and Length of Training

MPE foremen have indicated that it takes approximately six to nine months before they can successfully evaluate a prospective MPE mechanic. Therefore, it is suggested that the length of an apprenticeship program be at least one year. Furthermore, it is suggested that training be divided into two six-month periods. During the first six months the apprentice would learn to perform RPMs and simple troubleshooting and repair on a single type of relatively unsophisticated MPE equipment. Also, during this period the apprentice would receive formal training or be required to take self-instructional training covering such topics as technical vocabulary, basic electro-mechanical circuits, and the understanding and use of maintenance drawings and checklists. At the end of six months of training each apprentice would be evaluated by a maintenance supervisor and/or a maintenance training officer. Those who were progressing satisfactorily would be accepted into the second apprenticeship training phase and promoted to the grade of PFS-6.

During the second six months of training the apprentice would learn to maintain a second type of MPE equipment, and would attend additional formal courses of instruction and/or be required to study selected self-instructional material. Towards the end of this period of training the apprentice would take the MPE Mechanic Examination and would again be evaluated by a maintenance supervisor or a training officer. A satisfactory evaluation plus passing the maintenance examination would be the criteria for promotion to the position of MPE mechanic at the PFS-7 grade level.

The treatment of an apprentice who fails to pass the MPE Mechanic Examination or to receive a satisfactory evaluation would be left to the discretion of his maintenance foreman or training officer. He could be allowed to repeat one or more portions of the apprenticeship training, be allowed to remain in the maintenance force as a general mechanic or be asked to return to his former position within the post office.

As suggested earlier in this report it is difficult to assess maintenance capability through the use of a paper and pencil test. Rather, mechanics should be evaluated on the basis of maintenance performance tests. The present written maintenance examinations used by the post office should eventually be replaced by a structured performance testing program which would be part of the apprenticeship program and which also would be used to determine the promotability of journeyman mechanics.

Apprenticeship Entry Requirements

With one type of exception, all new MPE apprentice should be required to have passed the Apprentice Examination. This test assesses a person's general skills and knowledges regarding the maintenance of electro-mechanical equipment.

Occasionally there will be persons who are judged to be capable of maintaining MPE equipment, but who for one reason or another cannot pass the Apprentice Examination. It is recommended that these persons be assigned the position of general mechanic. After some period of time, perhaps four years, the general mechanic will have adequately demonstrated whether or not he has potential for becoming an MPE mechanic. Based on this practical demonstration and a favorable supervisory recommendation such persons could be allowed to enter the MPE apprenticeship program. These persons however, would be required to acquire all the skills and knowledges necessary to meet the requirements for promotion from apprentice to MPE mechanic -- they would have to learn to maintain two types of MPE equipment, and would have to pass the MPE Mechanic Examination.

Helper and General Mechanic Training

Currently mechanic helpers are not required to pass a maintenance aptitude examination, and general mechanics are required only to pass a mechanical aptitude test. No change in these entry requirements is recommended. It has been

suggested that the mechanic helper be required to pass the mechanical aptitude test. This is a possibility for further consideration. However, there always will be a need for helpers who, although quite capable in that position, do not have the capability for much, if any, advancement. Therefore, allowing the helper to enter the maintenance force should be based on the recommendation of maintenance supervisors.

At present, helpers and general mechanics have little opportunity to prepare themselves for entry into the ranks of the MPE mechanics. The post office has initiated a study which may correct this situation. In essence, the plan is to collect and to develop training self-instructional material dealing with such topics as elements of electricity, basic electronics, schematic reading, reading of engineering drawings, and so forth. These materials would be placed in all libraries of mechanized offices and helpers and general mechanics would be urged to use them for self-study.

Journeyman Mechanic Training

At present there are no standard training procedures for teaching journeyman mechanics how to maintain new or different types of MPE equipment. Often the mechanics, through on-the-job training or self-instruction, acquire the maintenance capability through their own study and initiative. For certain equipments, the Post Office Department has maintenance training programs to which mechanics can be sent. Usually mechanics sent to such courses already have been maintaining the equipment and are sent to the course for further instruction dealing primarily with equipment troubleshooting.

The Department has published maintenance series handbooks for most MPE equipments and the highly capable mechanic can use these handbooks to learn maintenance. In addition, most offices have borrowed or have developed training material which can serve both for instruction and as job aids.

For the major types of MPE equipment it would be most appropriate to develop self-instructional training packages. Such a package was developed for the Letter Sorting Machine (LSM) by HumRRO. This work was performed as part of Task SABER[1]. The task staff performed a maintenance analysis of the LSM and from this analysis developed a troubleshooting job aid manual which could be used both during training and on the job thereafter. In addition, the analysis led to the specification of instructional content and content sequence for the training program. Detailed lesson plans, training aids, and handouts for the training program were developed and packaged in a self-instructional package. Study of such a package prior to attending the formal POD training program allows the formal program to concentrate heavily on practical exercises and the more sophisticated troubleshooting procedures. The beginning portions of the package would be suitable for use during apprenticeship training and the entire package would be suitable for the local training of MPE mechanics. The development of self-instructional training packages for other types of MPE equipment is strongly recommended.

[1] Task SABER: Demonstration of a System for Development of Post Office Equipment Maintenance Training, Robert C. Trexler and Patrick J. Butler. Human Resources Research Office of The George Washington University.

CLASSIFICATION OF POST OFFICE MPE MAINTENANCE POSITIONS

Application of Job Evaluation Criteria

In 1953 a contractor to the POD conducted a job evaluation study of 83 positions which typically exist in field post offices. That study was performed as an aid to the establishment of the present PFS classification system. The study employed a factor-with-points system, and evaluated jobs on the basis of four factors: knowledge, responsibility, contacts, and physical requirement and environment. The factors and point distributions used were typical of those which have been successfully employed by many public and private organizations. The PFS grade system which stemmed from that study has proved to be a useful and workable system.

Changes in postal equipment and operating conditions do change the requirements for maintenance jobs and every few years it is necessary to re-evaluate these jobs in terms of the changes. Therefore, in this present study, job evaluation information was obtained for the positions of Mechanic Helper, General Mechanic, MPE-6 Mechanic, MPE-7 Mechanic, and Foreman, MPE Mechanics. The job analysis questions contained in Appendix D were used to collect the information. Each of these seven job analysis questions is practically identical to one of the seven job evaluation questions used during the original 1953 evaluation of postal job positions. For each job evaluation question the wording of the explanatory material, the number of, and the wording of the options were similar or identical to those used in the original study.

The job evaluation questions were asked of seven MPE foremen using the following procedures:

1. Each foreman was interviewed separately by a HumRRO representative.

2. The foreman was told that the purpose of the study was to obtain a better understanding of the requirements of maintenance positions.

3. The foreman was given a copy of the job analysis questions and asked, for each question, to do a comparative analysis of the five maintenance positions being examined. His responses were recorded on the answer sheet by the HumRRO representative.

4. For each question the foreman selected an option for the mechanic helper, then for the general mechanic, the MPE-6, the MPE-7 and the foreman, MPE mechanics.

5. Upon request clarification information was provided regarding the criteria which should be used when answering each question.

In the original 1953 study job evaluation options were converted into points using the tables contained in Appendix D. In this present study, the same point system was utilized.

The results of this study are shown in Table 1 and the data are presented in Table 2. The point total or score for each job position was obtained by averaging the point scores obtained by each of the seven foremen.

The results of this study suggest that the five positions evaluated all should be raised by one PFS level. More important, this study demonstrated that the 1953 job evaluation criteria and procedures still are usable. With a small amount of additional effort certain ambiguities in the criteria could be eliminated. This then would provide a very useful tool for the periodic re-evaluation of all or portions of postal service job positions.

Table 1

SUMMARY OF JOB EVALUATION STUDY

Maintenance Positions	Present PFS Level	Recommended PFS Level	PFS Level based on Job Evaluation Study	Job Evaluation Point Totals	PFS Level Point Range
Mechanic Helper	4	5	4+	169	PFS-5 = 154 - 171
General Mechanic	5	6	6	200	PFS-6 = 185 - 208
MPE-6 Mechanic	6	7	8	240	PFS-7 = 218 - 229
MPE-7 Mechanic	7	8	8+	250	PFS-8 = 230 - 253
Foreman, MPE Mechanics	9	10	11	332	PFS-10 = 287 - 324
					PFS-11 = 325 - 352

Table 2

JOB EVALUATION RAW DATA: NUMBER OF THE OPTION SELECTED BY EACH RATER FOR EACH JOB EVALUATION QUESTION

Raters	Mechanic Helper							General Mechanic							MPE Mechanic, PFS-6						
	Evaluation Questions							Evaluation Questions							Evaluation Questions						
	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7
MPE Foreman, Cincinnati	2	1	2	1	1	3	2	3	2	3	1	2	3	3	4	3	6	1	3	5	4
MPE Foreman, Detroit	3	1	2	1	1	3	2	-	-	-	-	-	-	-	4	6	5	1	1	3	2
Mails Foreman, Detroit	3	1	2	1	1	3	4	3	3	3	1	1	3	4	4	3	4	2	2	2	3
MPE Foreman, Buffalo	2	3	1	1	1	4	4	-	-	-	-	-	-	-	3	2	3	1	1	3	4
MPE Foreman, Sacramento	2	2	2	1	1	3	3	2	3	3	1	1	3	3	4	4	4	1	2	2	2
MPE Foreman, Sacramento	3	2	2	1	2	3	3	4	3	3	1	2	3	3	4	3	5	1	3	2	3
MPE Foreman, Portland, Ore.	3	1	2	1	1	4	3	4	2	3	1	3	3	3	4	2	3	1	3	3	3

(Continued)

Table 2 (Cont.)

JOB EVALUATION RAW DATA: NUMBER OF THE OPTION SELECTED BY EACH RATER FOR EACH JOB EVALUATION QUESTION

Raters	MPE Mechanic, PFS-7 Evaluation Questions							Foreman, MPE Mechanics Evaluation Questions						
	1	2	3	4	5	6	7	1	2	3	4	5	6	7
MPE Foreman, Cincinnati	4	3	6	2	3	5	4	4	4	7	4	4	5	4
MPE Foreman, Detroit	4	1	5	1	1	3	2	5	4	6	2	4	2	2
Mails Foreman, Detroit	4	4	5	2	2	2	3	5	5	6	4	4	2	3
MPE Foreman, Buffalo	4	4	3	1	2	3	3	-	-	-	-	-	-	-
MPE Foreman, Sacramento	4	4	4	1	2	2	2	4	5	5	3	3	1	1
MPE Foreman, Sacramento	4	4	6	1	3	2	3	4	6	7	2	4	1	2
MPE Foreman, Portland, Ore.	5	4	4	1	3	3	3	5	4	5	3	4	3	3

Pay Comparability of MPE Mechanics

Three years ago MPE mechanics were clearly underpaid relative to their industry counterparts. Since then all PFS grades have been raised by one grade and the pay for all PFS levels has been raised by approximately 5%.

It has been recommended in this report that all MPE maintenance positions be raised by one PFS level. In addition Congress is contemplating an across the board increase for postal employees of approximately 4.1%. If both events were to occur the result might be that MPE mechanics would be paid at a higher rate than their industry counterparts. To check on this possibility an analysis was performed using data supplied by the U.S. Department of Labor (see Table 3).

Hourly wage survey data was averaged for the fourteen cities covered during the second task MPE survey of maintenance mechanics. The survey data was adjusted upward by .04% for each month of difference between 1 July 1969 and the month during which the wage survey data was obtained. This is equivalent to an industrial wage escalation of approximately 5% per annum. The obtained and adjusted wage for the industrial positions of maintenance mechanic, maintenance electrician, millwright and automotive mechanic is shown in Table 3 along with the average hourly wages for each of these positions.

Table 4 compares adjusted hourly wages for industrial maintenance positions with present and proposed hourly wages for the PFS levels of 6, 7 and 8. With the exception of the comparison between the proposed salary for the PFS-8/Step 4 position and that of maintenance mechanic, the comparison shows that even with a one grade increase plus a 4.1% across the board salary increase, MPE mechanics still would not be earning more than their industry counterparts, assuming an industrial wage increase of 5% per annum.

Based on the proposed job duties and responsibilities for the MPE mechanic, PFS-7 level, this position is similar to the combined duties of a maintenance mechanic and a maintenance electrician. Therefore, it would be appropriate to compare the combined average rate for these two positions (3.94/hr) with the proposed salary of 3.82/hr for the PFS-7 mechanic. This comparison suggests an underpayment of .12¢ per hour.

According to the proposed duties and responsibilities for the senior MPE mechanic, PFS-8 level, this position is quite similar to the combined duties of a maintenance electrician and a millwright. The combined average salaries for these two positions is 4.13/hr, the same as that proposed for the PFS-8/Step 4 mechanic.

From the above comparisons it would appear that even with a one grade raise for journeyman MPE mechanics plus the proposed mid-69 PFS salary increase, the new MPE mechanic salaries would be no more than approximately comparable to their civilian counterparts. Indeed this may be the case. On the other hand, because of the reasons discussed below it might be that postal mechanics would end up receiving a higher pay.

The typical postal mechanic, because of his long years of postal service, is paid at the step 8 level. This salary level is considerably higher than the step 4 level used to determine pay comparability (PFS-6/Step 8 = $3.96; and PFS-7/Step 8 = $4.28). It is not possible to determine from Labor Department wage surveys the years of experience for the average non-postal mechanic. However, assuming comparability of experience for postal and non-postal mechanics, the proposed 1 July 1969 pay raise would make postal mechanic pay just about comparable to that for non-postal mechanics. Adding a one PFS-level grade increase to the proposed pay raise would make the pay of the average postal MPE mechanic more than his non-postal counterpart (PFS-7/Step 8 = $4.28 and PFS-8/Step 8 = $4.63).

From the above comparisons it is concluded that a recommendation to increase the PFS-level of MPE mechanics cannot be based solely on pay comparability considerations. Rather, this recommendation must be and can be supported on the basis

Table 3

U.S. DEPARTMENT OF LABOR HOURLY WAGE SURVEY DATA FOR THE POSITIONS OF MAINTENANCE MECHANIC, MAINTENANCE ELECTRICIAN, MILLWRIGHT, AND AUTOMOTIVE MECHANIC

City Surveyed	Survey Date	Adjustment Factor a/	Maintenance Mechanic		Maintenance Electrician		Millwright		Automotive Mechanic	
			Wage	Adj.	Wage	Adj.	Wage	Adj.	Wage	Adj.
Buffalo	Dec. '67	7.2%	3.68	3.94	3.77	4.04	3.81	4.08	3.63	3.89
Chicago	April '68	5.6%	3.77	3.98	3.93	4.15	3.91	4.13	4.04	4.27
Cincinnati	March '68	6.0%	3.38	3.58	3.79	4.02	3.89	4.12	3.62	3.84
Denver	Dec. '67	7.2%	3.46	3.70	3.62	3.88	--	--	3.82	4.10
Detroit	Jan. '68	6.8%	4.36	4.66	4.48	4.78	4.42	4.72	3.85	4.11
Houston	June '68	4.8%	3.70	3.88	4.02	4.21	3.86	4.05	3.22	3.37
Los Angeles	March '68	6.0%	3.80	4.03	4.09	4.34	4.38	4.64	4.11	4.36
Miami	Dec. '68	7.2%	2.74	2.94	3.35	3.59	--	--	3.12	3.34
Minneapolis	Jan. '68	6.8%	3.50	3.74	4.04	4.31	3.81	4.07	3.81	4.07
New Orleans	Feb. '68	6.4%	3.55	3.78	3.65	3.88	3.75	4.00	3.22	3.43
Omaha	Oct. '67	8.0%	3.36	3.63	3.70	4.00	3.76	4.06	3.18	3.43
Portland, Ore.	May '68	5.2%	3.79	3.99	3.78	3.98	--	--	4.10	4.31
Sacramento	Feb. '68	6.4%	3.67	3.91	3.74	3.98	--	--	3.97	4.22
Washington, D.C.	Sept. '67	8.4%	3.63	3.93	3.27	3.54	--	--	3.56	3.86
			ave. 3.60	3.84	ave. 3.80	4.05	ave. 3.95	4.21	ave. 3.66	3.90

a/ Survey data adjusted upward by .04% for each month difference between survey date and 1 July 1969.

Table 4

COMPARISON BETWEEN PRESENT AND PROPOSED HOURLY WAGES FOR MPE MECHANICS, AND THE ANTICIPATED HOURLY WAGES FOR THE CIVILIAN POSITIONS OF MAINTENANCE MECHANIC, MAINTENANCE ELECTRICIAN, MILLWRIGHT, AND AUTOMOTIVE MECHANIC

	Maintenance Mechanic ($3.84)	Maintenance Electrician ($4.05)	Millwright ($4.21)	Automotive Mechanic ($3.90)
PFS-6/step 4				
Present ($3.35/hr)	-.49	-.70	-.86	-.55
Proposed ($3.53/hr)	-.31	-.52	-.68	-.37
PFS-7/step 4				
Present ($3.59/hr)	-.25	-.46	-.62	-.31
Proposed ($3.82/hr)	-.02	-.23	-.39	-.08
PFS-8/step 4				
Present ($3.76/hr)	-.08	-.29	-.45	-.14
Proposed ($4.13/hr)	+.29	+.08	-.08	+.23

of the increased skill and knowledge requirements for MPE mechanics. The analysis of MPE equipment performed as part of this study and information obtained from the Labor Department suggests that the skill and knowledge requirements for MPE mechanics are higher than those for the civilian positions of maintenance mechanic, maintenance electrician, millwright, or automotive mechanic. This would especially be the case if MPE maintenance positions were redefined in accordance with the recommendations of this report.

Equal Pay for Equal Work

It is sometimes difficult to decide whether to compensate on the basis of a person's capability or on the basis of the requirements of his present job. Within the present MPE maintenance force there are many PFS-6's who have the capability of and who indeed are performing as the higher level PFS-7 mechanics. By following the recommendations presented here, it is quite conceivable that an MPE mechanic at the PFS-7 level eventually will become as skilled as the PFS-8 senior MPE mechanic. Should such persons be paid in accordance with their skills or in accordance with the requirements of their present position?

The basic compensation principle advocated here is that the mechanic be paid in accordance with the requirements of his job position. His capabilities determine his promotability, and, indeed, to increase his opportunities for promotion he should be allowed to expand his maintenance skills and knowledges. On the other hand, some deference must be made to the notion of "equal pay for equal work". Therefore, through job assignment practices an attempt should be made to keep the bulk of a mechanic's assignments within the duty and responsibility boundries as described in his job description. To do otherwise establishes a situation wherein an advantage can be taken of the superior mechanic's capabilities without providing suitable compensation for these capabilities. Eventually, as has already occurred in a number of mechanized offices, the various grades of journeyman mechanics would receive similar job assignments and the mechanics would come to feel that they all should be compensated at a similar and high level.

Need for Recruitment and Job-Turnover Data

Why is it that certain offices have difficulty filling MPE maintenance positions? Why is it that mechanics stay on at the post office even though they claim they are underpaid? When mechanics do leave the post office what are their reasons? There are no factual answers to these and to related questions, and therefore it is difficult to estimate the degree to which maintenance staffing problems are due to poor pay, if indeed that is the case.

At those offices experiencing difficulty in obtaining maintenance personnel it would be useful to recruit on the open market to see what success they would have. This would be one way of determining the relative attractiveness of postal maintenance positions.

At all offices it would be useful to conduct exit interviews with mechanics to collect information regarding the reasons why they are leaving the postal service.

Job Reclassification Versus Across the Board Raises

Since the establishment of the PFS classification system a tradition has developed relating to the grade relationships between various types of jobs within the Post Office. Once traditions become established they are difficult to upset. Therefore, it often is easier to administer an across the board raise than it is to administer selective raises based primarily on job reclassification. Difficult as it may be it still would be appropriate to periodically re-examine the classification of selected positons within the post office to see if their grade levels are still appropriate. For example, the MPE maintenance positions are usually compared with the position of automotive mechanic, PFS-6. While this study did not examine automotive maintenance positions, it is clear that during the last few years automotive vehicles have become increasingly sophisticated.

In particular, the skills and knowledges required to troubleshoot and maintain automatic transmissions and automotive electrical systems has established the requirement for at least two grades of automotive mechanics. This, despite the fact that the electrical and control systems for postal vehicles are not as complicated as those vehicles available in the open market, justifies a re-evaluation of existing jobs.

Job Analysis and Evaluation Form

Job classification should be based on accurate and detailed information regarding the duties and responsibilities of the job. At most post offices Compensation Officers are not familiar with maintenance positions and with rare exceptions are not familiar with maintenance duties and responsibilities. As an aid to the collection of more adequate job information, a job analysis and job evaluation form or checklist has been prepared (Appendix B). This checklist can be used by compensation officers when analyzing maintenance positions. This form would be used to collect information about the following job aspects: educational requirements; experience requirements; initiative and ingenuity requirements; responsibility requirements defined in terms of possible damage to equipment, operational losses, and responsibility for the work and safety of others; physical demands; working conditions; and unavoidable hazards. In addition, judgmental information would be collected regarding the seven job elements used when establishing the PFS system. That is, the job evaluation questions contained in Appendix D have been incorporated into the Job Analysis and Evaluation Form. Thus, this checklist can be used both to gather detailed information regarding the duties, responsibilities and specifications of a job, and to evaluate that job in terms of its appropriate PFS grade level.

JOB DESCRIPTIONS, JOB ASSIGNMENTS AND STAFFING CRITERIA

Breadth of Job Duties and Responsibilities

Job descriptions, job assignments and staffing criteria are interrelated. Any change in one may have a drastic effect on the other two. In this report it has been proposed that maintenance job positions be broad enough to provide management flexibility, yet narrow enough to allow for job mastery within a reasonable period of time. The suggested job descriptions have been written so that any one mechanic is responsible for two or more types of equipment and yet would not be responsible for learning how to maintain all types of MPE equipment. It was proposed that maintenance personnel become semi-specialists. These specialists would have a primary responsibility for maintaining certain types of equipment and a secondary responsibility for maintaining additional types of equipment. Finally, it is suggested that mechanics be given specific and circumscribed equipment maintenance assignments and that job assignments be made in accordance with job descriptions.

With the exception of a few very large facilities the activities of maintenance personnel must overlap to a certain extent in order to assure that all personnel can be given full work assignments. There are seldom enough higher level activities to keep the higher grade mechanics fully employed. Thus these mechanics must spend a certain portion of their working hours performing lesser skilled maintenance activities. The need for such job assignment flexibility is commonly recognized and is currently written into maintenance job descriptions.

Analysis of Staffing Requirements

Maintenance staffing requirements must be considered both in terms of the numbers of hours required to perform various types of activities on various types of equipments, and the various grades of maintenance personnel required to perform the needed maintenance. It is not possible to devise an exact one to one relationship between maintenance time requirements and maintenance position requirements by grade. For example, a maintenance time analysis might show that 15,000 hours of MPE maintenance are required per year, and this works out to approximately 7½ maintenance positions. In practice it might require eight or nine positions to adequately compass this 15,000 hours. And even then it will be necessary to assign many lower skilled activities to higher grade mechanic.

Each post office should first analyze its requirements in terms of the number of hours required to perform various types of standard maintenance activities on various types of MPE equipments. These requirements should then be converted to a specific prescription of what amounts and types of maintenance activity are to be performed on each tour. The maintenance requirements for each tour then can be analyzed in terms of the types and numbers of persons required on that tour. During this analysis by tour, specific maintenance responsibility prescriptions should be prepared for each proposed mechanic for that tour. The overall result of this type of analysis would be that each post office would have a clear prescription of what types of maintenance activities are to be covered on each tour and by each person on that tour. The job description for each maintenance position could be prepared in terms of specific primary and secondary maintenance responsibilities. Personnel selection, assignment, training and promotion would be based on a clearly defined program for providing personnel who can meet specific job prescriptions.

Implementation of the above would first require the development and checkout of improved staffing procedures. Then, means would have to be found for teaching the new procedures to maintenance supervisors.

Suggested Staffing Criteria

As an example of criteria which might be used to develop a maintenance force, the following suggestions are offered:

1. Worker-leader capability. Assume that all special projects, major MWOs, and major repairs requiring a work crew will be conducted during the second tour and will be headed by a senior MPE mechanic or by an MPE technician. This means that on the second tour, a major block of time must be set aside for such activities.

2. Inspection capabilities. The detailed, scheduled inspection of any piece of equipment can be conducted on any one tour. This can be performed by a senior MPE mechanic or by an MPE technician. One mechanic should be given the primary responsibility for inspecting each type of equipment. A backup capability should be provided using a second mechanic.

3. Troubleshooting capability. For each type of equipment, a troubleshooting capability should be provided on two tours. This would mean that difficult malfunctions could be immediately addressed on at least two or three tours during the day. If it is possible to defer troubleshooting for a particular tour, then this requirement can be eased. This is a PFS-8 level activity. The MPE technician would provide a backup capability and could be called day or night.

4. Routine preventive maintenance. For any one type of equipment this capability need be provided on only one tour, preferably the first tour since RPM can be used as an OJT device for training new mechanics. Assuming the existance of an apprenticeship program (Tour II) it would be necessary to conduct RPMs on the second tour. For any one type of equipment at least two persons should have an RPM capability. While this normally is a PFS-6 level activity, it can be assigned to PFS-7s if that is required in order to give such persons a reasonable work load.

5. Malfunction location. During conduct of RPM the major activity involves the detection of those malfunctions, misalignments, and worn parts which can be expected to be detected as a result of performance of the RPM. The majority of malfunctions will be of this type and therefore will be capable of being located by a PFS-7 mechanic who does not have the capability to perform sophisticated troubleshooting. A capability to locate relatively simple and common malfunctions should be, for any one type of equipment, provided on at least two tours. This would mean that upon notification of equipment breakdown the responsible PFS-7 mechanic could be sent to the equipment and could be expected to locate a reasonably high percentage of possible malfunctions. If he could not, he would notify the foreman who would make arrangements for troubleshooting of the equipment by a PFS-8 mechanic.

6. Repair capability. Repair capability requirements can vary widely depending upon the nature of the malfunction. The required repair can be so simple that a mechanic's helper could perform it or it could be so complicated that a 7-level or higher mechanic might have to improvise repair procedures. Generally speaking however, repair activities seem to be of the grade 7-level. We would expect therefore, that both 7 and 8-level mechanics would have the skills and knowledges required to handle most types of equipment repairs, especially those repairs involving the removal and replacement of parts.

7. Maintennace helper. One or more maintenance helpers could be provided on each tour. This would depned upon the number of such helpers required to assist in the conduct of special maintenance projects and the number required to perform cleaning and lubrication (C&L). The C&L activity is one typically

assigned to the maintenance helper. However, such assignment does depend on the ease with which access can be obtained to cleaning and lubrication points. If access is difficult or requires a reasonable amount of skill and/or caution, then the C&L activity can be combined with the RPM activity. Typically this is done for the Facer/Canceler and the Edger Stacker. Quite possibly there are sub-units of the LSM, bulk conveyor and other types of equipment where it would be desirable to combine these two activities.

Preparation of Individual Job Descriptions

It would be desirable to construct job positions so that each person has a primary responsibility for performing certain types of activities on certain types of equipment. In addition, he would have a secondary or backup responsibility for additional types of activities and equipments, possibly at a lower grade level. For example, the grade 8 mechanic might have a primary responsibility for inspecting and troubleshooting three types of MPE equipment and for performing or overseeing repairs on these two types of equipment. In addition, he could be given a backup or secondary inspection, troubleshooting and repair responsibility on at least one additional type of MPE equipment. As a secondary responsibility, grade 8 mechanics might be given a backup role with respect to the repair and RPM of one or two additional types of MPE equipment. This of course involves grade 7 activities. Finally, each mechanic, depending upon his PFS level and the size of his office, might be assigned a primary or secondary responsibility for one or more pieces of MPE-support equipment, such as hamper dumpers, mechanical cancelling machines, portable conveyors, and all or portions of the mail processing system. The special feature of all this is that the mechanic would not be held responsible for all MPE equipment, and secondly, his responsibilities would be spelled out quite precisely in terms of equipments and major types of repair activities. The maintenance director could prepare these individual job descriptions based on maintenance requirements and how he wished to allocate these requirements among the three tours. Furthermore, noticeable capability difference requirements would be present to distinguish between the PFS grade levels. Minimum grade level requirements could be spelled out fairly precisely but maximum requirements could be open ended. Guidance could be provided regarding the rate at which additional requirements could be given to any grade-level mechanic. This would prevent his foreman from unduly loading him with additional job duties. For example, it might be stated that maintenance of additional MPE equipments need be learned at the rate of no more than one piece of equipment per year, unless this restriction was waivered by the mechanic. As a reward, it might be stated that, other things being equal, promotion would be awarded to those mechanics who had demonstrated a willingness and capability to master the maintenance of additional types of equipments.

APPENDICES

A Proposed Job Descriptions

B Job Analysis and Job Evaluation Form

C List of Post Offices Surveyed

D Job Evaluation Questions and Job Rating Tables

E Conversion and Reclassification Guide for MPE Mechanics

APPENDIX A

PROPOSED JOB DESCRIPTIONS

An integrated set of mail processing equipment maintenance job descriptions have been developed for the following job positions: Mechanic Helper (PFS-4); Apprentice Mechanic, Mail Processing Equipment (PFS-5); Apprentice Mechanic, Mail Processing Equipment (PFS-6); Mechanic, Mail Processing Equipment (PFS-7); Senior Mechanic, Mail Processing Equipment (PFS-8); Maintenance Technician, Mail Processing Equipment (PFS-9); Foreman, Mail Processing Equipment (PFS-10); General Maintenance Mechanic (PFS-5); and Senior General Maintenance Mechanic (PFS-6). The job descriptions provide discrete levels and parameters of responsibility aligned with the proposed career structure for mail processing equipment maintenance.

The job descriptions include statements of duties and responsibilities and position qualifications. The prerequisite qualifications, mandatory and desirable are identified in the areas of knowledge and skill, education, experience, training, minimum test and performance levels and physical requirements.

The proposed career structure, the job descriptions and the prescribed qualifications are, of course, dissimilar to the existing jobs and their prerequisites. The differences are particularly apparent in the requirements for passing test scores in qualification tests being proposed, and in breadth of capability in terms of numbers of mail processing equipments in which proficiency must be demonstrated.

Further, it is recognized that personnel presently classified as mail processing equipment mechanics, conveyor mechanics, and general mechanics, may not qualify for direct reclassification to positions at the same PFS level as their current job. In recognition of this, a conversion and reclassification guide to protect personnel affected and provide an orderly process of change has been provided in Appendix E.

In order to assist in identifying the proposed positions, they have been numbered in the POD maintenance service group series with an "A" added to the group designator, i.e. Standard Position 6A-5, Senior Mechanic, Mail Processing Equipment. Job numbers 6A-1 to 6A-20 have been reserved for Mail Processing Equipment mechanics and technicians including the Electronic Technician, Mail Processing Equipment recently established but not included in this study. The numbers 6A-21 to 6A-30 have been reserved for supervisory jobs in mail processing equipment. The general mechanic positions have been numbered separately in the 6A-31 to 6A-50 series.

POD Position Description	Proposed
Occupational Code 4701	Standard Position 6A-1
Title: Mechanic Helper	Salary Level: PFS-4

POSITION FUNCTION. Performs, independently, a variety of simple non-technical and semi-skilled tasks which are incidental to recognized trades or crafts, or similar maintenance repair functions. Assists craftsmen and mechanics in performance of maintenance tasks which require skill and knowledge of the function.

DUTIES AND RESPONSIBILITIES

(A) Performs helper-type duties and responsibilities either of a specialized nature in a particular trade or craft, or of a general nature in a variety of trades or crafts, or both, as required by the needs of the service.

(B) Assists skilled workers in locating and correcting sources of trouble, and in the performance of typical maintenance, repair and modification work on postal equipment, buildings, or building systems. Individually performs the less difficult assignments in accordance with instructions or established practice. For example:

(i) Cleans, oils, greases, inspects and moves conveyor equipment; clears mail blockages and makes minor repairs.

(ii) Replaces burned out lamps, washes electric light fixtures and glassware, and makes minor repairs to electric systems, motors and case lights.

(iii) Makes minor carpentry and cabinet repairs, carries lumber and holds screenline partitions in place while being worked on, drills holes in wood or metal, bolts and unbolts screenline equipment.

(iv) Cleans, oils, adjusts and makes minor repairs to wire tying machines.

(v) Assists in sawing, bending and threading pipe and makes minor plumbing repairs.

(vi) Assists in assembling and unassembling heavy equipment.

(vii) Assists in installing, removing and repairing of letter box equipment.

(viii) Performs minor painting jobs and assists in major painting jobs.

(C) Sweeps and cleans up the work area upon completion of jobs; puts away tools, equipment and materials.

(D) May drive a light truck when necessary to get to or transport tools, equipment and material to the work site.

ORGANIZATIONAL RELATIONSHIPS. Reports to a foreman of maintenance or to a mechanic, as assigned.

POSITION QUALIFICATIONS.

(A) Knowledges and Skills:

(1) Must be able to read and/or comprehend simple written and oral technical instructions.

(2) Must be able to properly utilize common hand and power tools, and simple test and measuring equipment.

(B) Education: Must have a grade school education or equivalent. Training in shop mathematics, blue-print reading, and use of common tools is desirable.

(C) Experience: None

(D) Training: No prerequisites. Incumbents will receive on-the-job instruction in, and may receive formal school training for progression to apprentice mechanic in one of the crafts or maintenance skills identified below. The general title "Mechanic Helper" will be used for helper positions wherein no single trade or craft is primary in the work assignment. In work situations where the helper's primary assignment is in one of the indicated trades or crafts his position will be designated by the appropriate alternative title listed below. However, use of an alternative title is applicable only in those instances where the installation has a journeyman mechanic authorized in the trade indicated by the title.

Blacksmith-Welder Helper
Carpenter Helper
Electrician Helper
Elevator Mechanic Helper
Letter Box Mechanic Helper
Machinist Helper
Mail Processing Equipment Helper
Mason Helper
Office Appliance Repairman Helper
Painter Helper
Plumber Helper
Postal Machines Mechanic Helper
Scale Mechanic Helper

(E) Minimum Test and Performance Requirements: None

(F) Physical Requirements: Good near vision, color discrimination, eye-hand coordination, and manual dexterity. Ability to lift, carry and hold for short period materials weighing up to 80 pounds.

POD Position Description | Proposed

Occupational Code 5342 | Standard Position 6A-2

Title: Apprentice Mechanic, Mail Processing Equipment | Salary Level: PFS-5

POSITION FUNCTION. As an apprentice learns and performs routine preventive maintenance, troubleshooting and repair of one type of mail processing equipment. Assists mail processing equipment mechanics in complex troubleshooting, diagnosis and correction of equipment malfunctions. Performs cleaning, lubricating, inspection and simple maintenance tasks under supervision, following detailed instructions or established procedures. Learns and complies with safety regulations. Learns use of tools and simple measuring and test equipment.

DUTIES AND RESPONSIBILITIES:

(A) Learns routine preventive maintenance and routine troubleshooting and repair of * _____ through self-study, classroom and on-the-job training.

(B) As assigned, attends training courses and/or studies technical and training materials on equipment and maintenance-related topics.

(C) Performs routine preventive maintenance and simple troubleshooting and repair of ** _____.

(D) May perform mechanic-type duties and responsibilities of a routine nature assisting mail processing equipment mechanics performing maintenance, repair and modification on all mail processing equipment.

(E) Performs simple maintenance tasks following detailed instructions or established procedures and practices under supervision of mail processing equipment mechanics. These tasks include:

(i) Cleans, oils, greases, inspects and makes minor adjustments and repairs on mail processing equipment under supervision of qualified mechanics.

(ii) Assists mail processing equipment mechanics in repair, installation and removal, modification, adjustments, assembly and disassembly and movement of equipment.

(iii) Assists qualified mechanics in complex troubleshooting, diagnosis and correction of equipment malfunctions, utilizing tools and measuring and testing equipments.

(iv) Obtains tools and materials and transports to and from maintenance locations. Cleans and secures work area after completion of tasks.

(v) Makes simple written entries in equipment log books, status reports and work order.

(vi) May drive vehicles when necessary to work site.

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* Supervisor will enter type of mail processing equipment in individual's job description when training assignment is made.

** Job description of each mechanic will include types of equipment on which qualified.

ORGANIZATIONAL RELATIONSHIPS. Reports to a foreman of mail processing equipment maintenance or to a mechanic, as assigned.

POSITION QUALIFICATIONS.

(A) Knowledge and Skills:

(1) Must be able to comprehend and to follow simple printed or oral technical instructions, such as cleaning, lubricating, and preventive maintenance route sheets.

(2) Must be able to prepare and/or complete simple work orders; make simple entries in equipment maintenance log books; prepare simple equipment status reports.

(3) Must be able to use simple shop mathematics such as addition and subtraction of decimals and fractions.

(4) Must be able to properly utilize common hand and power tools and simple calibrated test/measurement equipment.

(B) Education: Must have two years of high school or trade school training, or the GED equivalent. Completion of trade school-type courses in shop, mathematics, blue-print reading, use of tools and test equipment is desirable.

(C) Experience: None required. Prior experience as a mechanic or mechanic helper in any maintenance function is desirable.

(D) Training: No prerequisites. Incumbents will receive on-the-job instruction and may receive formal school training for progression to apprentice mail processing equipment mechanic, MPE-6.

(E) Minimum Test and Performance Requirements: Must have obtained a passing score on the Apprentice Examination, or have a four year record of satisfactory work performance as a general mechanic.

(F) Physical Requirements: Good near vision, color discrimination, eye-hand coordination and manual dexterity is mandatory. Ability to lift, carry, hold objects weighing up to 50 pounds is necessary.

POD Position Description | Proposed

Occupational Code 5342 | Standard Position 6A-3

Title: Apprentice Mechanic, Mail Processing Equipment | Salary Level: PFS-6

Position Function. As an advanced apprentice, learns and performs routine preventive maintenance, troubleshooting, inspection, and repair of a second type of mail processing equipment. Assists mail processing equipment mechanics in complex maintenance actions and performs standard maintenance tasks such as preventive maintenance and troubleshooting, diagnosis and correction of equipment malfunctions of mail processing equipment on which trained. Prepares simple written maintenance activity reports and records.

Duties and Responsibilities:

(A) Learns routine preventive maintenance and routine troubleshooting and repair of *_____ (second MPE studied) through self-study, classroom and controlled on-the-job training.

(B) As assigned, attends training courses and/or studies technical and training materials on equipment and maintenance-related topics.

(C) Performs routine preventive maintenance, troubleshooting and repair of **_____ (first MPE learned) and, when qualified, of **_____(second MPE learned).

(D) Performs the less difficult duties and tasks, assists skilled mail processing equipment mechanics to perform maintenance.

(E) Performs simple maintenance tasks independently, following detailed instructions or established methods. These tasks include but are not limited to:

(i) Cleans, oils and greases, inspects, and makes simple, minor adjustments and repairs on mechanical portions of mail processing equipment.

(ii) Assists mail processing equipment mechanics in repair, installation and removal, modification, adjustments, assembly and disassembly, and movement of equipment, accomplishing some minor maintenance tasks independently.

(iii) Assists qualified mechanics in troubleshooting, diagnosis and correction of electro-mechanical mail processing equipment malfunctions, performing some minor repairs independently and by direction.

(iv) Utilizes hand and power tools and precision measuring and testing equipments.

(v) Obtains tools and materials for tasks and transports to work site.

(vi) Cleans and secures work area after completion of activities.

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* Supervisor will enter type of mail processing equipment in individual's job description when training assignment is made.

** Job description of each mechanic will include types of equipment on which qualified.

(vii) Inspects equipment for obvious signs of malfunction or incipient failure and reports symptoms detected.

(viii) Reads and comprehends standard simple maintenance procedures and prepares simple written reports of maintenance performed, deficiencies detected, and completes equipment logs, work orders, and status reports.

(ix) Observes safety rules.

ORGANIZATIONAL RELATIONSHIPS. Reports to a foreman of mail processing equipment maintenance or to a mechanic, as assigned.

POSITION QUALIFICATIONS:

(A) Knowledge and Skills:

(1) Must be able to comprehend, with assistance, fairly complicated technical material such as blue-prints, wiring diagrams, schematics, and material found in the Maintenance Series (MS) Handbooks.

(2) Must be able to prepare and/or complete simple work orders, make simple entries in equipment maintenance log books; prepare simple equipment status reports.

(3) Must be able to use simple shop mathematics such as addition and subtraction of decimals and fractions.

(4) Must be able to properly utilize common hand and power tools and simple calibrated test/measurement equipment.

(B) Education: Must have two years of high school or trade school training, or the GED equivalent. Completion of trade school-type courses in shop mathematics, blue-print reading, and use of tools and test equipment is desirable.

(C) Experience: Six (6) months of training and work experience on one type of mail processing equipment. Prior experience as a general mechanic in any maintenance function is desirable.

(D) Training: Six (6) months of training and work experience in the mail processing equipment apprenticeship training program.

(E) Minimum Test and Performance Requirements:

(1) Must have obtained a passing score on the Apprentice Examination.

(2) Must have successfully completed the first phase of mail processing equipment apprenticeship training program as evidenced by the ability to perform common types of maintenance and repair on one type of mail processing equipment.

(F) Physical Requirements: Good near vision, color discrimination, eye-hand coordination and manual dexterity is mandatory. Ability to lift, carry, hold objects weighing up to 50 pounds is necessary.

POD Position Description | Proposed

Occupational Code 5342 | Standard Position 6A-4

Title: Mechanic, Mail Processing Equipment | Salary Level: PFS-7

POSITION FUNCTION: Performs standard maintenance, inspection, troubleshooting and repair on two types of mail processing equipment, working independently. Repairs, removes, installs, modifies, assembles and disassembles, any mail processing equipment when working under supervision as a member of a work team. Reads, comprehends and utilizes manuals, schematics, diagrams and drawings to diagnose and correct equipment deficiencies. Learns routine preventive maintenance, troubleshooting and repair of a thrid type of mail processing equipment. Prepares or completes written equipment status reports, maintenance logs and work order documentation.

DUTIES AND RESPONSIBILITIES.

(A) Troubleshoots, diagnoses and corrects common or recurrent electro-mechanical malfunctions on at least two types of mail processing equipment, *_____ and *_____ independently, and performs standard preventive maintenance, troubleshooting, inspection, and repair of *_____, when qualified.

(B) Learns routine preventive maintenance, troubleshooting and repair of a third type of mail processing equipment, **_____.

(C) Performs minor repairs and adjustments and installs, removes, modifies, assembles, disassembles, any mail processing equipment when working under supervision as member of a work team.

(D) Reads, comprehends and utilizes manuals, schematics, and wiring diagrams to correct major deficiencies of three types of mail processing equipment without direct supervision.

(E) Prepares reports of equipment status and maintenance problems, and pertinent actions accomplished or proposed.

(F) Performs plug-in type repair on any type of electro-mechanical mail processing equipment utilizing standard guidance from manuals or SOPs.

(G) Performs routine maintenance on any post office equipment.

(H) Utilizes hand and power tools and precision measuring and testing equipment.

ORGANIZATIONAL RELATIONSHIPS. Reports to foreman of mail processing equipment maintenance or other designated supervisor.

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* Job description of each mechanic will include types of equipment on which qualified.

** Supervisor will enter mail processing equipment in individual's job description when training assignment is made.

POSITION QUALIFICATIONS.

(A) Knowledge and Skills:

(1) Must be able to comprehend, with assistance, fairly complicated technical material such as blue-prints, wiring diagrams, schematics and material found in the Maintenance Series (MS) Handbooks.

(2) Must be able to prepare or complete fairly complicated work orders and equipment status reports.

(3) Must be able to use simple shop mathematics such as addition and subtraction of decimals and fractions.

(4) Must be able to use powered shop equipment and heat process equipment, such as a drill press and welding torches, and a variety of precision measuring/testing equipment.

(B) Education: Must have completed four years of high school or appropriate trade school or the GED equivalent. Completion of trade school-type courses in shop mathematics, blue-print reading and use of tools and test equipment is desirable.

(C) Experience: One year of training and work experience in which routine maintenance on two types of mail processing equipment is learned and performed. Prior experience as a mechanic in any maintenance function is desirable.

(D) Training: One year of training and work experience in the mail processing equipment apprenticeship program.

(E) Minimum Test and Performance Requirements:

(1) Must have obtained a passing score on the mail processing equipment Mechanic Examination.

(2) Must have successfully completed the mail processing equipment apprentice training and demonstrate the ability to perform standard maintenance and repair on two types of mail processing equipment.

(F) Physical Requirements: Good near vision, color discrimination, eye-hand coordination, and manual dexterity. Ability to lift, carry and hold for short period materials weighing up to 50 pounds, is necessary

POD Position Description — Proposed

Occupational Code 5342 — Standard Position 6A-5

Title: Senior Mechanic, Mail Processing Equipment — Salary Level: PFS-8

POSITION FUNCTION. Performs, independently, any inspection, malfunction diagnosis, and repair, on at least three types of mail processing equipment to include their electrical control sybsystems. Acts as a work crew chief in the repair, removal, installation, modification, assembly and disassembly of any mail processing equipment. Utilizes and understands any type of POD maintenance reference materials. Provides technical assistance and training guidance including safety precautions, use of hand and power tools and measuring and test equipment, to lower level mechanics. Prepares complex, written, equipment work orders, status reports and maintenance procedures.

DUTIES AND RESPONSIBILITIES.

(A) Performs preventive maintenance, inspection and malfunction diagnosis and repair (including electrical control subsystems) of at least three types of mail processing equipment, *_____, *_____ and *_____.

(B) Troubleshoots, diagnoses and corrects unusual electro-mechanical malfunctions on at least the above specified types of mail processing equipment, working independently.

(C) Performs minor repairs and adjustments, installs, removes, modifies, assembles, disassembles, any mail processing equipment while working independently or as a lead mechanic with a work crew.

(D) Inspects and identifies any incipient and complex malfunction conditions on at least the three specified types of mail processing equipment, and corrects or reports detected deficiencies with recommended corrective actions and necessary changes to maintenance procedures.

(E) Utilizes schematics, wiring diagrams, and electrical and electronic test equipments to diagnose and correct major and complex electrical deficiencies of the specified three types of mail processing equipment.

(F) Prepares reports of maintenance activities and equipment status and problems, and recommends corrective actions and initiates work orders estimating time and materials requirements.

(G) Performs routine malfunction diagnosis and repair on any type of mail processing equipment utilizing standard maintenance publications, schematics, wiring diagrams, drawings, etc.

(H) Assists in the preparation and conduct of apprentice training. In those smaller offices not authorized an MPE maintenance training office, may be assigned prime responsibility for preparation and conduct of apprentice training.

(I) Observes and enforces safety rules.

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* Job description of each mechanic will include types of equipment on which qualified.

ORGANIZATIONAL RELATIONSHIPS. Reports to a foreman of mail processing equipment maintenance or to other designated supervisor.

POSITION QUALIFICATIONS.

(A) Knowledges and Skills:

(1) Must be able to comprehend, without assistance, fairly complicated technical material such as blue-prints, wiring diagrams, schematics, and material found in MS Handbooks.

(2) Must be able to prepare or complete complicated work orders and reports. Must be able to prepare "as-built" drawings. Must be able to prepare work schedules, and complicated equipment status reports.

(3) Must be able to use simple algebra, geometry and trigonometry in analyzing maintenance problems and accomplishing maintenance work orders or developing maintenance programs and diagnostic procedures.

(4) Must be able to use powered shop equipment and heat process equipment, such as a drill press and welding torches and perform calibration and alignment using precision measuring and testing equipment.

(B) Education: Must have completed four years of high school or appropriate trade school plus one year of specialized training and experience in appropriate trade or skill area, or appropriate military technical training or a full apprenticeship program in a related trade.

(C) Experience: At least three years of work experience performing all maintenance on three types of mail processing equipment after completion of the apprenticeship training program.

(D) Training: Must have completed the mail processing equipment apprenticeship training program and must have satisfactorily performed, independently, all types of maintenance on three types of mail processing equipment and guided the training of lower level mechanics in these equipments.

(E) Minimum Test and Performance Requirements:

(1) Must have obtained a passing score on the Senior MPE Mechanic Examination.

(2) Must have demonstrated ability to perform independently any maintenance on three types of mail processing equipment.

(F) Physical Requirements: Good near vision, color discrimination, eye-hand coordination, and manual dexterity. Ability to lift, carry and hold for short period materials weighing up to 50 pounds.

POD Position Description | Proposed

Occupational Code 5342 | Standard Position 6A-6

Title: Maintenance Technician, Mail Processing Equipment | Salary Level: PFS-9

POSITION FUNCTION. Performs quality control inspections and recommends corrective maintenance measures and changes to procedures. Identifies maintenance force skill level deficiencies and necessary personnel training requirements. Acts as the maintenance expert for the facility on designated types of mail processing equipment. Develops maintenance procedures, interprets reference materials and devises diagnostic strategies when required. Supervises individual on-the-job training and conducts maintenance training programs. Analyzes equipment status and recommends corrective actions.

DUTIES AND RESPONSIBILITIES:

(A) Performs quality control inspections of all types of mail processing equipment and provides technical expertise on *_____, *_____, and *_____.

(B) Troubleshoots, diagnoses and corrects any electro-mechanical malfunctions on any type of mail processing equipment.

(C) Plans and supervises projects to install, remove, assemble, disassemble, modify and perform major repairs on any mail processing equipments.

(D) Inspects, identifies and corrects potential complex malfunction conditions on any type of mail processing equipment or recommends corrective actions in reports.

(E) Improvises diagnostic strategies and troubleshooting procedures when standard manuals and procedures are not adequate, and writes alternative maintenance procedural instructions.

(F) Develops instructional materials to supplement POD training packages for local equipment configurations.

(G) Directs on-the-job training programs for the mail processing equipment maintenance force and arranges for required assistance to trainers and trainees. Conducts classes in mail processing equipment maintenance practices, troubleshooting, repair and use of tools and precision measuring and testing equipment.

ORGANIZATIONAL RELATIONSHIPS. Reports to a foreman or other designated supervisor. Supervises and assists work crews and training activities. Advises the mail processing equipment foreman on technical training and quality control of mail processing equipment maintenance.

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* Job description of each mechanic will include types of equipment on which qualified.

POSITION QUALIFICATIONS.

(A) Knowledge and Skills:

(1) Must be able to comprehend, without assistance, very complicated engineering drawings, schematics, and Maintenance Series (MS) Handbooks.

(2) Must be able to prepare training materials, complex maintenance procedures, work force schedules, equipment movement and modification work orders, and quality control and equipment improvement reports.

(3) Must be able to use advanced algebra, geometry and trigonometry in analyzing maintenance problems, planning, preparing and accomplishing work orders or developing maintenance programs and diagnostic procedures.

(4) Must be able to use powered shop equipment and heat-process equipment such as a drill press and welding torches, and to direct and develop work instructions, maintenance procedures and training materials involving tools, power equipment and precision measuring and testing equipment.

(B) Education: Must have completed four years of high school or trade school plus one year of specialized training and experience in appropriate trade or skill area, or appropriate military technical training, or an apprenticeship program.

(C) Experience: Must have performed satisfactorily as a senior mail processing equipment mechanic, (PFS-8) for at least three years and have demonstrated maintenance proficiency on complex problems on at least three types of mail processing equipment.

(D) Training: Must have completed the POD mail processing equipment apprenticeship training program and national training center programs on at least three types of mail processing equipment. Attendance at any available factory or manufacturers' special training programs on appropriate equipments is highly desirable.

(E) Minimum Test and Performance Requirements: Must have demonstrated above average capability to solve complex maintenance problems on at least three types of mail processing equipment. Must have written and oral communication skills.

(F) Physical Requirements: Good near vision, color discrimination, eye-hand coordination, and manual dexterity. Ability to lift, carry and hold for short period materials weighing up to 50 pounds.

POD Position Description | Proposed

Occupational Code 5342 | Standard Position 6A-21

Title: Foreman, Mail Processing Equipment Maintenance | Salary Level: PFS-10

POSITION FUNCTION. Plans activities of the mail processing equipment maintenance work force, assigns duties and tasks to mechanics and crews and directs training of personnel. Inspects work and equipment to verify quality of maintenance and completion of tasks. Analyzes equipment status and implements plans for correction of deficiencies and replacement actions. Prepares reports, evaluates and counsels personnel, recommends promotions and personnel actions and conducts training in and enforces safety regulations.

DUTIES AND RESPONSIBILITIES:

(A) Plans and assigns work activities of maintenance personnel and crews.

(B) Assigns mechanics to duties and tasks, and provides instructions, guidance and interpretation of regulations, rules, manuals, etc.

(C) Inspects maintenance work in progress, and assists, corrects and guides mechanics. Verifies satisfactory completion of maintenance tasks.

(D) Analyzes or assigns technicians to diagnose malfunctions and equipment deficiencies and directs or recommends corrective actions.

(E) Performs repair in abnormal situations, as necessary.

(F) Prepares special reports and supervises preparation or approves routine reports and equipment maintenance management records.

(G) Evaluates subordinates, recommends personnel actions including training, disciplinary and promotional.

(H) Enforces compliance with safety regulations and provides guidance to subordinates.

(I) Responsible for technical training of maintenance personnel including:

(1) Determining the need for training

(2) Conducting or arranging classroom and on-the-job training

(3) Assisting in development of local supplementary materials or revisions to manuals, handbooks, and training materials

(4) Arranging qualification testing activities for maintenance force.

ORGANIZATIONAL RELATIONSHIPS. Reports to the superintendent of mail processing equipment maintenance or other designated supervisor. Supervises mail processing equipment mechanics and other maintenance personnel, as necessary, on a tour or in a functional area.

POSITION QUALIFICATIONS.

(A) Knowledges and Skills:

(1) Must be able to comprehend, without assistance, very complicated engineering drawings, schematics, and Maintenance Series (MS) Handbook material.

(2) Must be able to prepare complex maintenance procedures and training materials, work force schedules, equipment modification and movement work orders and technical reports.

(3) Must be able to use advanced algebra, geometry and trigonometry in analyzing maintenance problems, preparing work orders or instruction, and developing maintenance and training programs.

(4) Must be able to direct work activities and prepare training material and maintenance procedures involving hand and power tools and equipment and precision measuring and testing equipment.

(B) Education: Must have completed four years of high school or trade school plus one year of specialized training and experience in an appropriate trade or skill area, or appropriate military technical training or civilian technical school.

(C) Experience: Must have performed satisfactorily as maintenance technician, mail processing equipment or a senior mechanic mail processing equipment, for at least three years.

(D) Training: Must have completed POD management, safety and supervisory courses.

(E) Minimum Test and Performance Requirements:

(1) Must have obtained a passing score on the MPE Maintenance Supervisor Examination.

(2) Must have demonstrated ability to supervise work activities as a crew leader and conduct training of lower level mechanics.

(F) Physical Requirements: Good near vision, color discrimination, eye-hand coordination, and manual dexterity. Ability to lift, carry and hold for short period materials weighing up to 50 pounds.

POD Position Description — Proposed

Occupational Code 5301 — Standard Position 6A-31

Title: General Maintenance Mechanic — Salary Level: PFS-5

POSITION FUNCTION. Performs, independently, preventive maintenance, inspections, troubleshooting and repair on non-mail processing postal equipment, material handling equipment and mechanical subsystems of conveyors, sorters, etc. As a member of a work crew, removes, installs, modifies, assembles, disassembles postal equipment, working under supervision. Prepares written equipment status reports, work order completion records and equipment maintenance logs.

DUTIES AND RESPONSIBILITIES:

(A) Performs independent routine preventive maintenance and inspection of non-mail processing equipment such as wire tying machines, canceling machines, fork lifts, and electric torches.

(B) Troubleshoots, diagnoses and corrects common or recurrent electromechanical malfunctions on portable power conveyors, electric trucks, facing tables, hamper dumpers, etc., working independently.

(C) Performs minor repairs and adjustments and installs, removes, modifies, assembles, disassembles, any postal equipment working under supervision as member of a work team.

(D) Inspects non-mail processing postal equipment and identifies and corrects incipient failure conditions or reports deficiencies and recommends corrective actions.

(E) Reads, comprehends and utilizes manuals, schematics, and wiring diagrams to correct major deficiencies of non-mail processing equipment operating independently of direct supervision.

(F) Prepares reports of maintenance problems and equipment status, and maintenance actions accomplished or proposed.

(G) Performs preventive maintenance and minor repairs on postal facilities equipment such as cleaning equipment, lawn mowers, fans, furniture, heating, air conditioning, refrigerating, etc.

(H) Utilizes hand and power tools and measuring and testing equipment and observe safety regulations.

ORGANIZATIONAL RELATIONSHIPS. Reports to a foreman, superintending engineer, building engineer or other designated supervisor or mechanic.

POSITION QUALIFICATIONS.

(A) Knowledge and Skills:

(1) Must be able to comprehend, with assistance, technical material such as simple blue-prints, wiring diagrams, schematics and Maintenance Series (MS) Handbooks pertaining to equipments maintained.

(2) Must be able to prepare or complete simple work order forms, make simple entries in equipment maintenance log books and prepare simple equipment status reports.

(3) Must be able to use simple shop mathematics such as addition and subtraction of decimals and fractions.

(4) Must be able to utilize common hand and power tools and simple calibrated testing and measuring equipment.

(B) Education: Must have two years of high school or trade school training or the GED equivalent. Completion of trade school courses in shop mathematics, blue-print reading, and use of tools and test equipment is desirable.

(C) Experience: None required. Prior experience as a mechanic or mechanic's helper is desirable.

(D) Training: None required. Incumbents will receive on-the-job training and may receive formal training in maintenance of some equipments.

(E) Minimum Test and Performance Requirements: Must have attained a passing score on the Apprentice Examination.

(F) Physical Requirements: Good near vision, color discrimination, eye-hand coordination, and manual dexterity. Ability to lift, carry and hold for short period materials weighing up to 80 pounds.

POD Position Description	Proposed
Occupational Code 5301	Standard Position 6A-32
Title: Senior General Maintenance Mechanic	Salary Level: PFS-6

POSITION FUNCTION: Performs complex troubleshooting, repair, modification and quality control inspection of any non-mail processing postal equipment including building, mail handling, mail movement (except vehicles) equipment and non-electrical portions of conveyors. Prepares written equipment maintenance reports, log entries and work order completion data. Trains and supervises activities of lower level mechanics.

DUTIES AND RESPONSIBILITIES:

(A) Performs independent quality control inspections of the maintenance performed and the serviceability status of non-mail processing equipment.

(B) Troubleshoots, diagnoses and corrects any electro-mechanical malfunctions on non-mail processing equipment.

(C) Plans projects to install, remove, assemble, disassemble, modify, and perform major repairs on non-mail processing equipments.

(D) Inspects, identifies and corrects potential malfunction conditions on all types of non-mail processing equipment or recommends corrective actions in reports.

(E) Improvises diagnostic strategies and troubleshooting procedures when standard manuals and procedures are not adequate.

(F) Provides quality control capability for the maintenance office through analytical inspection activities to detect potential problems and improper maintenance actions on non-mail processing equipment.

(G) Directs on-the-job training program for non-mail processing equipment maintenance personnel and arranges for assistance to trainers and trainees.

ORGANIZATIONAL RELATIONSHIPS. Reports to a foreman, superintending engineer, building engineer, or other designated supervisor. Supervises lower level general mechanics.

POSITION QUALIFICATIONS.

(A) Knowledge and Skills:

(1) Must be able to comprehend, with assistance, fairly complicated technical material such as blue-prints, wiring diagrams, schematics and material found in Maintenance Series (MS) Handbooks.

(2) Must be able to prepare or complete fairly complicated work orders, equipment status reports and maintenance records.

(3) Must be able to use simple shop mathematics such as addition and subtraction of decimals and fractions.

(4) Must be able to use hand and power tools, powered shop equipment and heat-process equipment such as a drill press and welding torches and simple calibrated measuring and testing equipment.

(B) Education: Must have two years of high school or trade school training or the GED equivalent. Completion of trade school courses in shop mathematics, blue-print reading, and use of tools and test equipment is desirable.

(C) Experience: At least three years satisfactory performance as a general maintenance mechanic is mandatory.

(D) Training: None required. On-the-job and formal training on equipment maintained as a general mechanic is desirable.

(E) Minimum Test and Performance Requirements: Must have demonstrated ability to perform general maintenance mechanic duties without supervision and to direct and train less experienced maintenance personnel.

(F) Physical Requirements: Good near vision, color discrimination, eye-hand coordination, and manual dexterity. Ability to lift, carry and hold for short period materials weighing up to 50 pounds.

APPENDIX B

Job Analysis and Evaluation Form
for
Equipment Maintenance Job Positions

1. Name of Office or Organization _____

2. Job Under Analysis:
   a. Approved Title _____
   b. Approved PFS Level _____
   c. Position Identification _____
   d. Suggested Title of Position _____
   e. Recommended Salary Level _____

3. Job Analyst:
   a. Title and Grade _____
   b. Date of Analysis _____

4. Information Sources:
   a. Title and Grade _____
   b. Title and Grade _____
   c. Title and Grade _____

GENERAL INSTRUCTIONS

The information recorded on this Form should be obtained from supervisory personnel and preferably from two or more such persons. In addition, for the sake of accuracy and completeness it is highly desirable to obtain information from one or more incumbents of the job under analysis. The form should be completed in accordance with the following guidance:

a. The Job Analyst should be a member of the Compensation or Personnel Office.

b. The Information Source(s) should be supervisory personnel intimately familiar with the duties, responsibilities, and specification requirements of the job.

c. Section II of this Form (JOB DESCRIPTION DATA) should be completed during a face-to-face interview with the Information Source.

d. If desired, the initial version of Section I (Job Summary, Job Description and Job Specifications) can be prepared by the Information Source(s) after the interview is terminated.

e. The final version of Section I should be prepared by the Job Analyst and reviewed by the Information Source(s) for accuracy and completeness.

f. The evaluation of this job should be performed in accordance with Supplement A to this Form -- Criteria and Procedures for Evaluating POD Equipment Maintenance Job Positions.

Job Description Data Obtained Using Job Analysis and Evaluation Form

Skill and Knowledge

I Education

1. Reading & Comprehension Requirements
2. Technical Writing Requirements
3. Mathematics Utilization Requirements
4. Formal Education Requirements
5. Requirement to Attend PO Training Programs

II Experience

1. Work Experience Requirement
   a. Non-post Office Experience
   b. Post Office Experience
2. Requirement to use Tools and Equipment
3. Requirement to use Testing and Measuring Equipment

III Initiative and Ingenuity

1. Equipment Diagnosis and Repair Requirements
2. Equipment Inspection and Quality Control Requirements
3. Post Office Equipment Maintenance Tasks Requirements

Responsibility

IV Scope of Responsibility

1. Level of Responsibility
2. Damage to Equipment
3. Operational Losses
4. Supervision of Others
5. Numbers and Types of Persons Supervised

V Contacts

1. Level and Type of Contacts or Human Relations Required

VI Work of Others

1. Plan, Direct and Instruct Others
2. Supervision by Others

VII Safety of Others

1. Probable Impact of and Types of Injury-Producing Accidents

Work Effort

VIII Physical Demands

1. Normal Physical Requirements
2. Infrequent and Unusually Strenuous Physical Requirements

Job Conditions

IX Working Conditions

1. Typical Working Conditions
2. Specific Disagreeable Working Conditions Encountered on Job

X Unavoidable Hazards

1. Probable Impact of Exposure to Normal Job Hazards
2. Unavoidable Unusual Job Hazards

Section I

POSITION DESCRIPTION

1. Job Summary (Basic Function of Job)

2. Job Description (List of Major Duties & Responsibilities)

POSITION DESCRIPTION

3. Organizational Relationships

   a. Report to or is supervised by: (Title & Grade)

   b. Supervises or directs: (Title(s) & Grade)

4. Job Specifications

   a. Educational Requirements

   b. Experience Requirements

   c. Technical ability requirements

   d. Learning ability requirements

   e. Supervisory requirements

   f. Physical requirements

   g. POD Test and/or work-evaluation requirements

Section II

JOB DESCRIPTION DATA

Skill and Knowledge.

I Education

1. Reading & Comprehension. Successful performance on this job includes a requirement to read and comprehend technical material.

   a. Select that one statement below which best describes the technical material comprehension requirements for this job.

      ___ Must comprehend and follow simple oral instructions. No requirement to read technical material.

      ___ Must comprehend and follow simple printed or oral technical instructions such as cleaning, lubricating, and preventive maintenance procedures and route sheets.

      ___ Must comprehend, with assistance, fairly complicated technical material such as blue prints, wiring diagrams, schematics, and material found in MS Handbooks.

      ___ Must comprehend, with no assistance, fairly complicated technical material such as blue prints, wiring diagrams, schematics, and material found in MS Handbooks.

      ___ Must comprehend, with no assistance, very complicated engineering drawings, schematics, MS Handbook material.

   b. List those technical materials (engineering drawings, MS Handbooks, equipment schematics, etc.) which must be used by incumbents of this job. Briefly describe how each is used by the job incumbent.

2. Technical Writing. For most maintenance positions there is a requirement to prepare written reports covering maintenance performances, procedures and/or instructional materials.

   a. Select that one statement below which best describes the writing or report preparation requirements of this job.

      ___ No requirements for written materials.

      ___ Prepare or complete simple work orders; make simple entries in equipment maintenance log books and equipment status reports.

      ___ Prepare or complete fairly complicated work orders and equipment status reports.

      ___ Prepare or complete complicated work orders or reports. May involve submission of "as-built" drawings. May prepare work schedules and/or complicated equipment status reports.

      ___ Prepare complex maintenance procedures and training materials, work force schedules, equipment movement and modification work orders and product improvement reports.

   b. List and describe briefly each type of written material which must be prepared by incumbents of this job. (Work orders, equipment logs, maintenance reports, route sheets, repair or diagnostic procedures, instructional material, etc.)

3. Mathematics. Successful performance on many maintenance jobs includes a requirement to use mathematics.

a. Select the statement or statements below which best describes the mathematical requirements of this job.

___ No requirements to use mathematics.

___ Must add, subtract, and multiply whole numbers.

___ Must be able to use simple shop math such as addition and subtraction of decimals and fractions.

___ Must be able to use simple algebra and geometry, or handbook formulae involving algebra, geometry and trigonometry.

___ Must be able to use advanced algebra, geometry and trigonometry in analyzing maintenance problems, and accomplishing maintenance work orders, or developing maintenance programs and diagnostic procedures.

b. Describe the mathematical requirements of this job position.

Examples: 1.

2.

3.

4. Educational Requirement

This question appraises the amount of general education or schooling required to acquire the general knowledges and abilities needed to satisfactorily discharge the duties and responsibilities required by the job. This knowledge may be acquired by formal schooling, or it may be obtained through special courses, self-education or training programs in technical or special fields.

Which one of the options below best describes the educational requirements of the job under analysis?

1. ___ None

2. ___ Grade School

3. ___ High School or Equivalent

4. ___ High School plus Technical Training or its Equivalent

5. ___ 2 Years of College or its Equivalent

6. ___ 4 Years of College or its Equivalent

5. Post Office Training Programs.

List below those Post Office Training courses which the job incumbent should successfully complete.

2. Tools and Equipment. To successfully perform this job, an incumbent must be able to:

___ Use common hand tools.

___ Use common power tools.

___ Use powered shop equipment and heat-process equipment, such as a drill press and welding torches.

___ Use precision power and machining equipment, such as lathes.

___ Direct and develop work instructions, training material and maintenance procedures involving tools and power equipment.

___ Other

Examples: 1.

2.

3.

3. Testing and Measuring Equipment. Incumbents of this job must be able to:

___ Use simple measuring equipment.

___ Use simple calibrated measuring/testing equipment.

___ Use a variety of precision measuring/test equipment.

___ Perform calibration and alignment of precision measuring and testing equipment.

___ Develop procedures for use of and diagnostic actions with precision measuring/testing equipment.

___ Other.

Examples: 1.

2.

3.

Indicate with a check (✓) those instruments and equipments which must be used by incumbents of this job.

___ Scale	___ Sine bar
___ Caliper	___ Plug, ring, snap gauge
___ Depth gauge	___ Thread plug gauge
___ Dividers	___ Gauge blocks
___ Combination square	___ Dial bore indicator
___ Feeler gauges	___ Vernier protractor
___ Surface gauge	___ Indexing head
___ Dial indicator	___ Mechanical comparitor
___ Micrometer caliper	___ Optical comparitor
___ Vernier height gauge	___ Brinell hardness tester
___ Vernier micrometer caliper	___ Multimeter
___ Oscilloscope	___ Voltmeter
___ _____ Other	___ Tube tester
___ _____ Other	___ _____ Other
___ _____ Other	___ _____ Other

II. Experience

1. Work experience. Before a mechanic can perform satisfactorily, he must have a certain amount of work experience in addition to knowledge acquired in schools or training situations. Some of this experience can be acquired on non-post office jobs and on equipment, which is similar, but not identical, to post office equipment. However, a certain amount of experience must be acquired within the post office and on post office equipment to attain adequate proficiency. For the job position now under examination two types of experience is necessary. It is essential that it be determined: (a) how much work experience should the job incumbent have had in maintenance of equipment similar to post office machinery; and (b) how much experience actually working in this job on post office equipment is required.

Indicate below the amount of work experience required on equipment similar but not necessarily identical to post office equipment in order to insure capability of adequate proficiency in this position.

a. ___ up to 3 months
b. ___ up to 6 months
c. ___ up to 1 year
d. ___ up to 2 years
e. ___ up to 3 years
f. ___ up to 4 years
g. ___ up to 5 years

Indicate below the amount of work experience necessary in this job to attain acceptable capability.

a. ___ up to 6 months
b. ___ up to 1 year
c. ___ up to 2 years
d. ___ up to 3 years
e. ___ up to 4 years
f. ___ up to 5 years
g. ___ up to 6 years
h. ___ up to 7 years
i. ___ up to 8 years

Total Experience Requirement Equals:

50% of Non POD Experience _____

\+

100% of POD Experience _____

Total _____

III Initiative and Ingenuity

1. Diagnosis and Repair. Which one of the five statements below best describes the diagnostic and repair requirements of this job?

a. ___ Required to follow simple technical instructions; perform simple preventive maintenance and repair actions without close supervision; recognize and report obvious conditions of equipment wear; little or no requirement to diagnose equipment breakdowns.

b. ___ Required to diagnose and determine required repairs for mechanical and simple electro-mechanical equipment; follow detailed maintenance schedules and work orders; make minor decisions regarding status of equipment.

c. ___ Required to handle routine diagnostic and repair of common mechanical and electro-mechanical equipment; recognize signs of improper operation; make general estimates regarding time and cost of repairs. May serve as "back-up" repair expert for simpler types of electro-mechanical equipment.

d. ___ Required to diagnose and repair the more complex types of MPE, plant, automotive, etc. equipment; serve as "back-up" expert for a limited number of electro-mechanical equipments; respond effectively to emergency equipment breakdown; make equipment maintenance decisions requiring considerable ingenuity, initiative and judgment.

e. ___ Required to diagnose and repair electronic and/or complex electro-mechanical equipments; requires outstanding ability to work on complex maintenance problems, devise new maintenance methods and diagnostic procedures, meet new conditions necessitating a high degree of ingenuity, initiative, and judgment.

Describe briefly the most important diagnostic and repair requirements of this job.

2. Inspection and Quality Control. Which of the following statements best describes the inspection and quality control requirements of this job?

___ Recognize and report obvious conditions of equipment wear or incipient failure.

___ Perform sequence of standard equipment inspection actions and determine servicability status and need for repair.

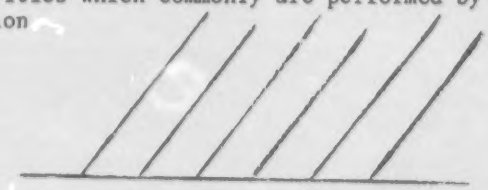
___ Inspect and identify problems in fairly complex electro-mechanical equipment. Make general estimates of time and cost of repairs. Inspect equipment for operation within qualitative and safety limits using established standards.

___ Inspect and identify need for special maintenance and diagnose malfunctions of complex electro-mechanical and electronic equipment.

___ Devise new maintenance and inspection methods and modification actions on complex equipments.

Describe briefly the most important inspection and quality control requirements of this job.

3. Maintenance Tasks on Post Office Equipment. List the major types of equipment which incumbents of this position must be able to maintain. List the six most important types of equipment. For each equipment, check those maintenance activities which commonly are performed by incumbents of this job position



Inspection - routine

Inspection - special or complex

Clean/lube

Routine P.M.

Simple Troubleshooting

Difficult Troubleshooting

Simple repair

Complex repair

Overhaul

Disassemble/assemble

Calibrate/align

Teach others to maintain

Supervise maintenance of

IV Scope of Responsibility

1. Level of Responsibility

This question appraises the extent to which a job incumbent is responsible or accountable for policies, methods, results, and assets. Responsibility is a measure of quality--of the degree and complexity of analytical ability, judgment, discernment and timeliness involved in making decisions or taking action relating to policies, procedures, methods, and assets. This is called "responsibility level".

Which of the options below best describes the Responsibility Level of the job under examinations?

1. ___ Little independent action; errors minor and easily caught and corrected.

2. ___ Work covered by specific instructions. Work is checked at later stages and results of errors not serious.

3. ___ Work requires interpretation. Errors detected in later checks but can be confusing or damaging.

4. ___ Errors not easy to detect and may cause delays or excess costs.

5. ___ Decisions affect other activities or employees. Errors caught only on inspection or later reviews.

6. ___ Work affects programs and policies and errors in judgment may be costly.

7. ___ Responsibility is major and not under any except general control.

8. ___ Top-level responsibility for a program, division or installation.

2. Damage to Equipment

A competent, fully trained, and careful maintenance man may occasionally cause damage to tools, material, facilities or equipment. If this should happen on this job, what is the probable extent of the loss which would result from a single mishap?

___ $10 or less

___ Over $10 but under $100

___ Over $100 but under $250

___ Over $250 but under $500

___ Over $500 but under $1,000

___ Over $1,000

Briefly describe examples of the mishaps which are likely to occur.

1.

2.

3.

3. Operational Losses

A competent, fully trained, and careful maintenance man may occasionally operate equipment improperly, neglect certain aspects of preventive maintenance, or make faulty judgments regarding the diagnosis or repair of equipment. This, in turn, may lead to the breakdown of operational equipment. If this should happen on this job, what is apt to happen as the result of a single improper or careless action? Check those statements below which best describe the probable or typical consequences of such a breakdown.

___ Nothing much. Would not cause a slow-down in mail processing activity. Substitute equipment or manual methods could easily compensate for breakdown.

___ Might slow down mail processing but only for an hour or two at most. Small number of operations people might be idled for 1-2 hours.

___ Would slow down mail processing and increase work load of next shift. Small number of operations people might be idled for 3-4 hours.

___ Would slow down mail processing for two or more shifts. Fairly large number of operations people might be idled for one or more shifts.

___ All or major portions of mail processing activities would be severly hindered for over twenty-four hours. Would have to hire large numbers of temporary employees to process mail.

___ Other.

Briefly describe examples of the types of breakdowns which might occur due to faulty performance of maintenance duties and responsibilities.

1.

2.

3.

4. Supervision of Others

a. Responsibility can be related to the number of individuals that are dependent upon a supervisory or leading position for final decision, judgment, or organization. This question inquires into the number of persons supervised by incumbents of the job position under analysis.

How many persons are supervised by incumbents of the job position under analysis?

1. ____ None
2. ____ Up to 10
3. ____ Up to 20
4. ____ Up to 50
5. ____ Up to 100
6. ____ Up to 200
7. ____ Up to 500
8. ____ Up to 1000
9. ____ Over 1000

b. List of job titles, grade, and numbers of persons for each job position supervised by the job position under examination. List no more than the ten top grade positions.

Job Title	PFS Level	Numbers Supervised
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

V Contacts

1. This question inquires into the type and level of contacts or human relations required by the job in meeting and dealing with people both inside and outside of the organization. Although it would seem that the contact with the public should be the more important consideration, the very operation of the Post Office, decidedly a service organization, also requires teamwork among the individuals and considerable exchange of information with the operating unit. Tact, courtesy, public relations were considered when preparing the options listed below.

   Which one of the below options best describes the type and level of contacts required of incumbents of the job position under examination?

   1. _____ Only routine internal contacts or specific compliance with direct order required.

   2. _____ Requires routine contacts for giving routine direct information or courteous handling in compliance with well-defined regulations.

   3. _____ Requires contacts with public and other postal crafts on routine matters but where politeness and tack are required.

   4. _____ Involves contacts with public or other members of Department to make adjustments or investigate and reconcile differences of some significance.

   5. _____ Requires contacts with major Government agencies or with the public on a broad scale on important public relations matters.

   6. _____ Requires effective contacts affecting the basic public relations and/or industrial relations of the Department or a major installation.

IV Work of Others

1. Planning, Directing, Instructing

Journeyman maintenance personnel are expected to perform without close supervision, and generally speaking, are held accountable for their own work. In addition, certain maintenance positions may have a responsibility for assisting, instructing, planning, or directing the work of others. Check below those statements which best describe the responsibilities which go with the job position under examination.

___ Responsible only for own work.

___ Responsible for instructing and directing one or two helpers or general mechanics, or leading small work crew on a fairly simple maintenance job.

___ Responsible for instructing, directing and/or planning the work for a small group of journeyman mechanics or a larger group of general or apprentice mechanics. May act as a leader for special maintenance projects requiring up to five persons.

___ Responsible for directing, planning and accomplishment of maintenance work by a group of up to ten persons or twenty percent of the maintenance force for a shift. Instructional duties may cover the more complex mail processing and building equipments.

___ Responsible for directing, planning and accomplishment of maintenance work by approximately twenty persons or fifty percent of the maintenance force for a shift. Instructional duties may cover either all facility equipment or all mail processing and mail handling equipment.

Briefly describe examples of responsibility for others which may occur.

1.

2.

3.

2. Supervision by Others

a. To whom do incumbents of the job position normally report?

b. Describe briefly the nature of the supervision received by or guidance provided to incumbents of this position.

VII Safety of Others

All workers have a responsibility for performing their work in such a way as to avoid or prevent injury to others. However, competent and careful maintenance personnel occasionally may cause injury to others through improper actions or momentary carlessness. Check those statements below which best describe the consequences of a single injury-producing accident by persons in this job.

___ Accident would cause only very minor injury and would not result in loss of work-time by person injured. Only one or two persons would normally be affected.

___ Accident could cause a minor cut, bruise, sprain, etc., which might cause a work-time loss of one or two hours. Not more than four or five persons would normally be injured.

___ Accident could cause a fairly serious cut, bruise, sprain, burn, etc., which might result in a work-time loss of one to five days and could affect up to ten or twelve persons.

___ Accident could cause a very serious injury such as a broken bone, loss of a limb or eye, internal injuries, extensive burns, etc., which might result in a work-time loss of one to six months, and could involve many persons.

___ Accident could result in the death or permanent incapacitation of the person injured.

Describe briefly three types of injury-producing accidents which are apt to be caused by persons in the job position being described.

1.

2.

3.

Work Effort

VIII Physical Demands

Select that statement below which describes best the usual or normal physical requirements of this job.

____ occasional light physical effort similar to office work

____ sustained light physical effort

____ occasional heavy physical effort

____ frequent heavy physical effort

____ constant or extremely heavy physical effort

Briefly describe the physical requirements for this job.

On occasion unusually strenuous physical demands may be placed on incumbents of this job. Briefly describe these unusual demands and estimate their frequency and duration.

a.

b.

c.

Job Conditions

IX Working Conditions

Which of the five statements below best describe the typical working conditions in which this job is performed?

___ Normal office working conditions.

___ Normal floor working conditions.

___ Somewhat disagreeable working conditions due to exposure to noise, dust, grease, oil, steam or similar elements.

___ Continuous exposure to several disagreeable conditions or to one condition which is particularly disagreeable.

___ Continuous and intensive exposure to several extremely disagreeable elements.

The extent of exposure to disagreeable working conditions varies widely among jobs. Indicate with a check the specific disagreeable working conditions encountered on this job and the normal estimated daily exposure.

	None None	One hr	Three hrs	Six hrs	Eight hrs
Harmful fumes, gases smoke and odors	___	___	___	___	___
Dirt, dust & grease	___	___	___	___	___
Oil	___	___	___	___	___
Acids	___	___	___	___	___
Harmful weather conditions--outside	___	___	___	___	___
Heat	___	___	___	___	___
Cold	___	___	___	___	___
Humid	___	___	___	___	___
Drafts	___	___	___	___	___
Water	___	___	___	___	___
Noise	___	___	___	___	___
Vibration	___	___	___	___	___
Chips & shavings	___	___	___	___	___
Special clothes, goggles, respirators	___	___	___	___	___
Eye strain	___	___	___	___	___
Illumination					
Excellent	___	___	___	___	___
Fair	___	___	___	___	___
Poor	___	___	___	___	___
Surroundings					
Crowded	___	___	___	___	___
Orderly	___	___	___	___	___
_____ Other	___	___	___	___	___
_____ Other	___	___	___	___	___
_____ Other	___	___	___	___	___
_____ Other	___	___	___	___	___

X Unavoidable Hazards.

There are some jobs which are characterized by their inescapable potential hazard. In most jobs exposure to abnormal hazard does not occur. The hazard exposure in this job can be described as:

___ Accident or health hazards negligible.

___ Accidents improbable, outside of minor injuries, such as abrasions, cuts, or bruises. Health hazards negligible.

___ Exposure to lost-time accidents is such that a crushed hand or foot, loss of fingers, eye injury from flying particles is a job condition. Some exposure to occupational disease, not incapacitating in nature.

___ Exposure to serious health hazards or incapacitating accident, such as loss of arm or leg is inherent in the job.

___ Exposure to accidents or occupational disease which may result in total disability or death is unavoidable on the job.

Examples of unavoidable unusual hazard in this job are:

1.

2.

3.

APPENDIX C

U.S. POST OFFICES SURVEYED

Preliminary Survey March 1968 City	Validation Survey January 1969 City
Buffalo	Buffalo
Chicago	Chicago
Cincinnati	Cincinnati
Denver	Denver
Detroit	Detroit
Los Angeles	Houston
Louisville	Los Angeles
Memphis	Miami
Miami	New Orleans
Nashville	Omaha
New Orleans	Portland
Omaha	Sacramento
Portland	Washington, D.C.
Sacramento	
Washington, D.C.	

APPENDIX D

JOB EVALUATION QUESTIONS AND JOB RATING TABLES

Q-1. Educational Requirement

This question appraises the amount of general education or schooling required to acquire the general knowledges and abilities needed to satisfactorily discharge the duties and responsibilities required by the job. This knowledge may be acquired by formal schooling, or it may be obtained through special courses, self-education, or training programs in technical or special fields.

Which one of the options below best describes the educational requirements of the job under analysis?

1. _____ None
2. _____ Grade School
3. _____ High School or Equivalent
4. _____ High School plus Technical Training or its Equivalent
5. _____ 2 Years of College or its Equivalent
6. _____ 4 Years of College or its Equivalent

Q-2. Work Experience Requirement

In addition to formal and/or trade school training, a job incumbent usually needs certain skills and knowledges which are generally acquired through work experience. When answering this question, consider the extent to which the job under examination requires knowledges -- in addition to formal education -- of the type usually obtained through prior and/or on-the-job training or work experience.

Which one of the options below best describes the work-experience requirement for the job under analysis?

1. _____ Up to 6 Months
2. _____ Up to 1 Year
3. _____ 1 to 3 Years
4. _____ 3 to 5 Years
5. _____ 5 to 7 Years
6. _____ 7 to 10 Years
7. _____ Over 10 Years

Q-3. Responsibility Level

This question appraises the extent to which a job incumbent is responsible or accountable for policies, methods, results, and assets. Responsibility is a measure of quality -- of the degree and complexity of analytical ability, judgment, discernment and timeliness involved in making decisions or taking action relating to policies, procedures, methods, and assets. This is called "responsibility level."

Which of the options below best describes the Responsibility Level of the job under examination?

1. _____ Little independent action; errors minor and easily caught and corrected.
2. _____ Work covered by specific instructions. Work is checked at later stages and results of errors not serious.
3. _____ Work requires interpretation. Errors detected in later checks but can be confusing or damaging.
4. _____ Errors not easy to detect and may cause delays or excess costs.
5. _____ Decisions affect other activities or employees. Errors caught only on inspection or later reviews.
6. _____ Work affects programs and policies and errors in judgment may be costly.
7. _____ Responsibility is major and not under any except general control.
8. _____ Top-level responsibility for a program, division or installation.

Q-4. Supervision

Responsibility can be related to the number of individuals that are dependent upon a supervisory or leading position for final decision, judgment, or organization. This question inquires into the number of persons supervised by incumbents of the job position under analysis.

How many persons are supervised by incumbents of the job position under analysis?

1. _____ None
2. _____ Up to 10
3. _____ Up to 20
4. _____ Up to 50
5. _____ Up to 100
6. _____ Up to 200
7. _____ Up to 500
8. _____ Up to 1000
9. _____ Over 1000

Q-5. Contacts

This question inquires into the type and level of contacts or human relations required by the job in meeting and dealing with people both inside and outside of the organization. Although it would seem that the contact with the public should be the more important consideration, the very operation of the Post Office, decidedly a service organization, also requires teamwork among the individuals and considerable exchange of information with the operating unit. Tact, courtesy, public relations were considered when preparing the options listed below.

Which one of the below options best describes the type and level of contacts required of incumbents of the job position under examination?

1. _____ Only routine internal contacts or specific compliance with direct order required.
2. _____ Requires routine contacts for giving routine direct information or courteous handling in compliance with well-defined regulations.
3. _____ Requires contacts with public on routine matters but where politeness and tact are required.
4. _____ Involves contacts with public or other members of Department to make adjustments or investigate and reconcile differences of some significance.
5. _____ Requires contacts with major Government agencies or with the public on a broad scale on important public relations matters.
6. _____ Requires effective contacts affecting the basic public relations and/or industrial relations of the Department or a major installation.

Q-6. Working Conditions

This question appraises the conditions under which persons must work. The term "Working Conditions" refers to the surroundings, the conditions of light, heat, exposure to the outside elements, and to the normal amount of hazards encountered in the performance of the job. In other words, this question inquires into the "disagreeableness" of a job.

Which of the below options best describes the working conditions of the job under examination?

1. _____ Normal office conditions
2. _____ Normal floor conditions
3. _____ Some Noise, Dirt, Outside working conditions
4. _____ Chiefly Noise, Dirt, Outside working conditions
5. _____ Extreme Hazard or Disagreeable working conditions

Q-7. Effort

The effort and strength requirements for a job are indicative of the amount of physical work required of incumbents of that job. When answering the question below consider the amount of lifting, the weight of the materials lifted, and the frequency of such actions.

Which of the below options best describes the work or effort requirements of the job under analysis?

1. _____ Light Office work
2. _____ Sustained but light work
3. _____ Occasional heavy work
4. _____ Frequent heavy work
5. _____ Constant or extremely heavy work

POD JOB EVALUATION WORK SHEET

Job Title: _____

Job Factors:

KNOWLEDGE . . . . . Schooling _____

Experience _____ . . . . . Points _____

RESPONSIBILITY . . . . . Responsibility Level _____

No. Persons Supervised _____ . . . . . Points _____

CONTACTS . . . . . Degree of Contacts _____ . . . . . Points _____

PHYSICAL REQUIREMENTS . . Working Conditions _____

Working Effort _____ . . . . . Points _____

Job Rating Table[1]

Factor: KNOWLEDGE

Question #1 Education Requirements	Question #2 Experience Requirements						
	Up to 6 Mo.	Up to 1 Yr.	1-3	3-5	5-7	7-10	Over 10
1. None	25*	55	62	75	100	130	175
2. Grade School	55	60	67	80	105	135	180
3. High School	63	68	75	88	113	143	188
4. High School & Technical	75	80	87	100	125	155	200
5. 2 Years College	100	105	112	125	150	180	225
6. 4 Years College	138	143	150	163	188	218	263
Graduate Degree	175	180	187	200	225	255	300

[1] To be used with Job Analysis Questions #1 and #2, or, Questions I-4 and II-1 of the Job Analysis and Evaluation Form for Equipment Maintenance Job Positions.

Job Rating Table[1]

Factor: RESPONSIBILITY

Question #3 Responsibility Level	Question #4 Number of People Supervised: None	Up to 10	Up to 20	Up to 50	Up to 100	Up to 200	Up to 500	Up to 1000	Over 1000
1	50	55	63	75	90	110	138	175	250
2	55	60	68	80	95	115	143	180	260
3	63	68	76	88	103	123	151	188	275
4	75	80	88	100	115	135	163	200	300
5	90	95	103	115	130	150	178	215	335
6	110	115	123	135	150	170	198	235	375
7	138	143	150	163	178	198	226	263	425
8	175	180	188	200	215	235	263	300	500

[1] To be used with Job Analysis Questions #3 and #4, or, Questions IV-1 and IV-4 of the Job Analysis and Evaluation Form for Equipment Maintenance Job Positions.

Job Rating Table[1]

Factor: CONTACTS

	Degree of Contact	Points
Question #5	A	20
	B	25
	C	35
	D	50
	E	70
	F	100

[1] To be used with Job Analysis Question #5, or, Question V-1 of the Job Analysis and Evaluation Form for Equipment Maintenance Job Positions.

Job Rating Table[1]

Factor: PHYSICAL REQUIREMENTS

		Question #7 Physical Requirements				
		A	B	C	D	E
	Working Conditions	Light Office	Sustained Light	Occasional Heavy	Frequent Heavy	Constant of Extreme Heavy
Question #6	1. Normal Office	15	19	25	33	45
	2. Normal Floor	19	23	29	37	49
	3. Some Noise, Dirt, Outside	25	29	35	43	55
	4. Chiefly Noise, Dirt, Outside	33	37	43	50	63
	5. Extreme Hazard or Disagreeableness	45	49	55	63	75

[1] To be used with Job Analysis Questions #6 and #7, or, Questions VIII and IX of the Job Analysis and Evaluation Form for Equipment Maintenance Job Positions.

APPENDIX E

CONVERSION AND RECLASSIFICATION GUIDE FOR MPE MECHANICS

The proposed new career structure, positions and prerequisite qualifications have been developed to provide:

1. a pattern for the development and promotion of mail processing equipment mechanics from helper to technician or supervisory positions during a typical employment career.

2. equal pay for equal work, skill, knowledge, and responsibility

3. realistic, mandatory qualification standard for all positions

4. an improved training system to support career development in direct relationship to initiative and application of the individual mechanic.

Only in a few cases will mail processing equipment maintenance personnel satisfy the mandatory prerequisites for reclassification into the new structure and positions. However, the rights, seniority, salary level and career status of all personnel must be protected. Conversely the implementation of this system establishes mandatory standards which must be met, primarily by the initiative and personal efforts of all involved. The basic guidelines which will protect the individual and permit an orderly conversion to the new system should include the following:

1. A general mechanic will be permitted to enter the MPE apprenticeship training program at the PFS-5 level on probationary status to learn maintenance of an MPE equipment item without passing the A-Test after four years of satisfactory general mechanic duty.

2. An MPE mechanic who has not learned maintenance of the mandatory numbers of MPE equipments will be given twelve months in which to do self-study, receive on the job training, and develop a demonstrable capability in the required two types of mail processing equipment.

3. A foreman may authorize an additional period of training, if an MPE equipment cannot be learned in the prescribed six months period. An extension may be granted once, only, for a three month period for any equipment.

4. Failure to meet satisfactorily mandatory prerequisites after an appropriate conversion period will result in reclassification to general mechanic, PFS-5 or, as appropriate, clerk or mail handler.

5. Promotion to PFS-7, 8 and 10 will be contingent upon attaining a passing grade in the appropriate test following normal or probational duty in the next lower grade.

6. A conveyor mechanic may enter the apprenticeship training program for up to one year of training, study and duty to meet standards for promotion to PFS-7, Mechanic, MPE.

7. Mail Processing Equipment Maintenance personnel who have a record of satisfactory performance may be retained in their original standard position indefinitely, but will not be considered for promotion unless the mandatory position qualifications are met.

8. New employees in the MPE maintenance function must meet the time elements and mandatory standards to be retained in the MPE career development structure.

9. The Director, Office of Maintenance, will review qualifications of the MPE maintenance force and assign personnel to learn specified types of MPE to provide optimum flexibility and adaptability. Personal desires of the members of the maintenance force will be considered to the extent possible when training assignments are made. However, a balanced-skill maintenance force has the higher priority in assigning personnel to training.

10. A passing score in the Apprentice Test may be waived in the case of employees who have demonstrated satisfactory performance prior to implementing the career system.

11. All promotions except PFS-5 to PFS-6 after satisfactory completion of phase one of the Apprenticeship Training Program will be on the best qualified basis.

12. The best qualified determination will be based upon a composite evaluation including test scores above mandatory minimum and supervisory evaluation.